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DECEMBER 1979

TRAINING ANALYSIS AND EVALUATION GROUP
ORLANDO FLORIDA 32813

DEVELOPMENT AND EVALUATION OF A REMEDIAL READING WORKBOOK FOR NAVY TRAINING

J. Peter Kincaid Thomas F. Curry, Jr.

Training Analysis and Evaluation Group

December 1979

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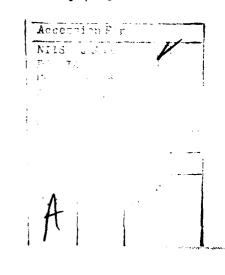
FOREWORD

This study is one of a series of studies addressing the general area of readability in Navy recruit training in response to tasking by the Chief of Naval Education and Training (CNET). The primary result has been the development and evaluation of the Navy-relevant remedial reading workbook incorporated into this report.

Appreciation is expressed to the following personnel for their assistance in the development and testing of the workbook:

The staff of the Academic Remedial Training (ART) Division, Navy Recruit Training Command, Orlando, who reviewed each exercise through a series of drafts and field tested the workbook. The ART staff was headed by AVCM V. Jones; military instructors were YN2 Keskeys, YN2 Gonzales, MS3 Clausen, SK3 Fogarty, and RM1 McCall; civilian instructors from the Orange County Webster Adult Education Center were Mrs. Nancy Ashcroft, Mrs. Linda Bradshaw, Mrs. Kathy McLaughlin, and Mrs. Joan Hendrickson. LT G. Molatch and LCDR J. Keefer arranged for the testing of the workbook. Military instructor B. Millard also participated in the field test.

- . Dr. N. Kerr of the Chief of Naval Technical Training staff who gave helpful suggestions about the organization of the workbook and helped arrange the field test.
- . Drs. H. Bowman, P. Jones, and R. Kaiser of Memphis State University, who reviewed the draft exercises in the workbook and offered many helpful suggestions.
- . Mr. A. Poole, Chief Illustrator, and Mr. G. Knapp of the Technical Data Branch, Naval Training Equipment Center, Orlando, who did the illustrations and art work.
- . Dr. M. Zajkowski, Mr. D. Copeland, and Mr. C. Cordell of the Training Analysis and Evaluation Group, who provided technical review of the exercises in the workbook.
- . CDR Charles Corkins, Jr., CNET (N-532), who provided support and encouragement throughout the conduct of TAEG's readability project.



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The workbook is designed to augment existing commercial nonmilitary oriented remedial reading materials now being used in Navy Academic Remedial Training (ART).

The results of a 2-month field test of the workbook by personnel of the Orlando RTC ART division were positive, indicating that it is a useful tool and that students are interested in, and motivated by, the Navy-related materials.

The workbook, intended as a prototype for future development, has been distributed to all Navy RTC ART divisions and is being distributed to Navy Junior ROTC students in high schools throughout the United States. Application of this technique in regular recruit training is being considered.

Unclassified

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SECTION I

INTRODUCTION

Many of the candidates for Navy enlistment have deficient reading skills. In the current recruiting climate, the pool of potential recruits is becoming smaller and the reading ability of recruits appears to be declining.

The Navy is concerned with the functional reading ability of its personnel. Of particular importance is the need to teach the recruit with deficient literacy skills to read and use Navy training and job reading materials.

In view of this problem, the Navy has established Academic Remedial Training (ART) programs for the purpose of assisting recruits in overcoming deficiencies in reading abilities. These deficiencies interfere substantially with the successful completion of recruit training. The ART divisions are located at each of the three recruit training centers. The goal of the program is to raise the reading ability of the recruits experiencing such handicaps to the sixth grade level. This level is judged to be the minimum required for adequate understanding of recruit training materials.

In support of the remedial training program, the Training Analysis and Evaluation Group (TAEG) was tasked by the Chief of Naval Education and Training (CNET) to produce a Navy-relevant remedial reading workbook to augment existing commercial nonmilitary-oriented materials. This tasking is in response to SECNAV Instruction 1510.3 (2 June 1978), Remedial Training in Basic Skills, which states:

It is the policy of the Department of the Navy to provide, when indicated, on-duty remedial job-relevant basic skills training in order to fill personnel requirements.

Job-relevant basic skills training is defined in this same instruction as:

Any instruction in basic skills which utilizes the contents of training courses, job tasks or career advancement requirements as the basis of the curriculum.

The intent of this instruction is to provide remedial training required for successful completion of Navy training programs, adequate job performance, and career advancement.

NEED FOR REMEDIAL TRAINING IN THE MILITARY SERVICES

A recent study conducted by the Department of Defense (Sellman, 1979) concluded that each of the military services has a substantial number of new

¹CNET 1tr Code N-53 of 20 Dec 78

enlistees with reading deficiencies. The percentages of newly enlisted personnel in the military services that have reading abilities below the sixth grade level range from a low of 4.6 percent in the Air Force to a high of 16.3 percent in the Army. The figure for the Navy is 8.3 percent. Sixth grade reading ability is considered the minimum level the trainee should possess to graduate from recruit or basic training and function reasonably well during the first enlistment.

A Government Accounting Office (GAO) study (1977) addressing illiteracy problems stressed the need for literacy training in the armed services and pointed out the critical role of reading ability in job-performance and in the advancement of military personnel throughout their enlisted careers.

Available information demonstrates that poor readers, when compared to the average military population, (1) have higher discharge and attrition rates, (2) experience more difficulty in technical training, (3) perform less satisfactorily on the job, (4) and have less potential for career advancement. Such conditions are not only costly but inhibit effective use of manpower.

The importance of reading ability for the successful completion of recruit training was articulated in detail by the Navy Personnel Research and Development Center (NPRDC) (Duffy, 1976). A sample of over 22,000 recruits undergoing training in San Diego from June 1974 to February 1975 was tested using the Gates-MacGinitie Reading Test, Survey D (Gates and MacGinitie, 1965). Armed Forces Qualification Test (AFQT) scores and Odds of Effectiveness ratings were also used in the battery. The Odds of Effectiveness rating is derived from an actuarial table used by recruiters to predict completion of the first enlisted tour. A composite score is derived from years of schooling, the number of expulsions and suspensions from school, and the AFQT score (Plag, 1968). The Gates-MacGinitie reading test score, however, was by far the best predictor of attrition from recruit training.

CURRENT MILITARY INITIATIVES IN REMEDIAL TRAINING

The military services (except the Marine Corps) provide some form of literacy training and each has policies to integrate the remedial training into recruit (or basic) training. The Army requires that the remedial reading program for basic trainees be Army skill-related.

Reading and vocabulary reinforcement will use, as applicable, Soldiers' Manuals, DA pamphlets, Army regulations, and field manuals, supplemented by instructor guides, dictionaries, other learning aids, and available reading improvement materials and equipment. Emphasis will be given to vocabulary improvement in the job tasks the trainee will encounter in MOS training.²

²Army Regulation 621-45, Change 2, 15 December 1978

The Army's literacy training is part of their Basic Skills in Education Program (BSEP) which covers not only remedial reading but also remedial mathematics and English as a Second Language (ESL).

The Air Force literacy training program described by Stitch, Fox, Hauke, and Zaph (1977) requires all newly inducted Mental Category IV personnel reading below the sixth grade level to be given remedial reading instruction. This program is administered prior to basic training.

The Navy's remedial reading program is currently the major part of the ART. Academic Remedial Training activities are located at each of the Navy's Recruit Training Centers (RTC) (Orlando, Florida; San Diego, California; and Great Lakes, Illinois).

PURPOSE OF REPORT

The purpose of this report is to describe the development of the format and content of a Navy-relevant remedial reading workbook and the evaluation of the workbook in the Navy's remedial reading program. The workbook was seen as a necessary supplement to the ART curriculum which did not contain enough Navy-relevant material. Since the workbook was designed as an addition to, rather than a replacement for, the ART curriculum, this report contains a description of how the workbook matches the curriculum.

APPROACH

The development of the workbook involved a two-pronged approach including:

- . examination of existing Navy-relevant materials that might be appropriate for inclusion into the ART curriculum, and
- interviews with subject matter experts (both RTC personnel and remedial reading specialists) to determine appropriate content and format of the workbook.

The initial effort in developing the workbook began with a review of existing Navy-relevant remedial reading materials to ascertain what was immediately useful. Three such sources were located. Two were developed for foreign Navy personnel learning English as a second language; the third was last used during the mid-1960s in Project 100,000 for Navy personnel who were functionally illiterate.

The Navy-relevant English as a Second Language texts were:

- a three volume series, <u>Navy Terminology-Seamanship</u>, published by the Defense Language Institute in 1975, and
- The Language of the Navy in English (Sansom, 1978) produced by a commercial publisher.

They are not part of the current ART curriculum. Both should be useful if the Navy establishes an English as a Second Language program. The other Navy-relevant reading source is the two volume series, Navy Life, which was published by the Bureau of Naval Personnel and last widely used during the mid-1960s for Project 100,000 (Fletcher, 1976). These two volumes were developed for recruits with reading skills below the fourth grade level. The current ART program is geared to students with reading skills between the fourth and sixth grade levels. Therefore, the Navy Life series is not part of the current ART curriculum.

The second effort in developing the workbook was to interview ART instructors and RTC personnel in order to obtain insights into the design of formats for the workbook. These individuals provided considerable information on the Navy subject matter that should be contained in the workbook. The topics suggested were considered most difficult for recruits in regular recruit training and could be incorporated into formats suggested by the remedial reading instructors.

ORGANIZATION OF THE REPORT

In addition to this introduction, the report contains three sections and two appendices. Section II describes the current ART program. Section III describes how the sections of the workbook match the ART curriculum, selection of content, and vocabulary and readability controls employed. Section IV presents the evaluation of the workbook, the manner in which this was accomplished, and conclusions and recommendations. The workbook Improving Your Navy Reading Skills is presented as appendix A. Appendix B contains questionnaire items and instructor responses.

SECTION II

THE NAVY'S ACADEMIC REMEDIAL TRAINING PROGRAM

As a prelude to the description of the development of the workbook, it is worthwhile to describe the rationale and organization of ART. According to the current Academic Remedial Training curriculum guide published by the Chief of Naval Technical Training (CNTECHTRA) in 1979, the ART program is designed to remediate the deficiencies of the recruit as measured and identified by diagnostic instruments. The remediation activities, who mastered, enable the recruit to complete recruit training with at least a snimum proficiency level.

The diagnostic instrument currently in use is the Stanford Diagnostic Reading Test (1976, Brown Level). It measures the major components of the reading process to diagnose strengths and weaknesses in reading. There are five subtests: vocabulary, reading comprehension, phonetic analysis, structural analysis, and reading rate.

The auditory vocabulary subtest requires the recruit to select the word or words (that are dictated) that best fit the meaning of a sentence.

The reading comprehension subtest assesses both literal and inferential comprehension by the use of short reading passages, followed by multiple-choice questions. Passages cover a variety of subjects and are written for students in grades 5 through 8.

The phonetic analysis subtest assesses the recruit's ability to recognize particular sounds in words and to select a word that has the sound in it.

The structural analysis subtest measures the ability of the recruit to identify the first syllable of two-syllable words (syllabication) and to identify meaningful word parts and blend them into real words (blending).

The reading rate subtest assesses the recruit's ability to read easy material quickly with comprehension. Since the subtest is designed to measure speed of reading, very few recruits are expected to finish it within the time limit. The number of correct responses indicates the level of reading with comprehension, while the number of items attempted (right or wrong) can be used to measure speed of reading.

Figure 1 shows how the subtests of the Stanford Diagnostic Reading Test are related to the separate modules of instruction in the ART program. There are two differences between the modules of the ART program and the subtests of the Stanford Diagnostic Reading Test. Phonetics analysis and structural analysis are separate in the standard test but are combined into a single ART module (decoding). Also the ART curriculum contains a study skills module, which is not a part of the Stanford test. All recruits in the ART program go through the study skills module; study skill is not measured by the diagnostic test. Recruits in ART go through only the modules in ART (except for study skills) on which they are shown to be deficient according to the Stanford test.

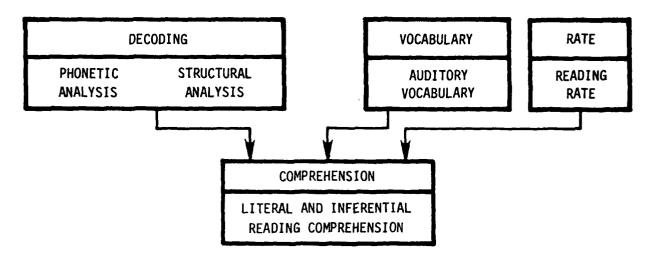


Figure 1. Relationship Between Stanford Diagnostic Reading Test (Brown)
Subtests and ART Components (from ART Curriculum Guide)

Placing ART students only in those modules in which they have demonstrated deficiencies is working well. Recruits are gaining the reading skills they need to successfully complete recruit training in the shortest possible time. The average time to complete ART is currently less than 4 weeks, and more than 90 percent of ART graduates are completing recruit training.

SECTION III

DEVELOPMENT OF THE WORKBOOK

The remedial reading workbook contained in appendix A of this report was developed for use by recruits with deficient reading skills. The format and contents of the workbook are based on the following points of guidance:

- . The structure is consistent with that of the Navy's existing ART program, which consists of five modules (see section II).
- . The format is comparable to that used by publishers of commercial remedial reading materials, with emphasis on such factors as readability and vocabulary.
- . Important topics from the regular recruit training program are incorporated into the text. Given that the most important job for the recruit is to complete recruit training, the workbook is job-related reading material.

COMPATIBILITY OF WORKBOOK WITH ART CURRICULUM

To insure compatibility with the reading skill components in the ART program, the workbook was written to directly incorporate several of the same sections--reading comprehension, word analysis skills (including decoding), and vocabulary. The other two ART modules are also represented in the workbook. Reading rate can be measured by timing recruits working through the comprehension exercises; there is a table in the appendix of the workbook for this purpose. The workbook stresses study skills to the extent that topics included are those that recruits need to master to complete recruit training.

The workbook was originally designed as a supplement to, rather than a replacement for, the existing ART curriculum materials. However, it has now become a regular part of the curriculum. For example, the entire word analysis skills section of the workbook is designed for students who have already mastered basic concepts in phonetic and structural analysis. ART students will have worked through a considerable number of commercially available exercises before being assigned exercises in this workbook section. Also, the entire vocabulary section is based specifically on "Navy" words (e.g., "coxswain," "aft"). While these are important for the ART student to learn, they still represent only part of the vocabulary that should be mastered. Most vocabulary words contained in Navy training material are also common in such widely used reading material as popular magazines and newspapers. Therefore, vocabulary sections of commercially available remedial reading kits are useful for the ART student. The vocabulary section of the workbook is a supplement to these.

READABILITY AND VOCABULARY CONTROLS

Educational publishers ordinarily use readability measures such as the Flesch Reading Ease formula (Flesch, 194P) and vocabulary measures such as the Dale-Chall list of common words (Dale and Chall, 1948) in their production

of remedial reading materials. Similar processes were used in the production of the workbook.

Readability of each comprehension passage was measured by the Flesch-Kincaid readability formula currently in wide use by the military services (Kincaid, Fishburne, Rogers, and Chissom, 1975; Army Regulation 310-3, Change No. 12, 15 September 1979; MIL-M-38784A, Amendment 5, 24 July 1978). The reading grade level of each passage as well as the number of words in each passage are listed on p. 122 of the workbook. Seven out of nine passages range from grade levels of 4.0 to 6.5. Two of the exercises dealing with military subject matter have higher grade levels. "Recognizing Chief Petty Officers and Other Enlisted Personnel" is written at a grade level of 8.5. "Military Justice" is written at a grade level of 10.5. These two more difficult passages were included to help the ART student transition from remedial reading to the reading of regular recruit training material which is typically written at the ninth grade level or higher.

Exercises in the comprehension section were arranged to be read in sequence. The ordering was completed considering both number of words in each exercise and its readability level. Shorter and more readable exercises are at the beginning of the section and longer more difficult exercises are at the end. Many publishers use the Dale-Chall list of common words to control the vocabulary words appearing in the text. The Dale-Chall list is not appropriate for Navy training material as it is based on recognition of words by elementary school students. What is a common word to a Navy recruit is not necessarily a common word to a fourth grade student. Thus, a decision was made to construct a list of common Navy terms.

This list is based on a computerized word frequency analysis of the two recruit training books, <u>Basic Military Requirements</u> (1973) and <u>The Bluejackets' Manual</u>, 20th Ed. (Naval Institute, 1978). A total of nearly 240,000 words from these two sources were counted and about 1,900 words were identified as appearing 10 or more times. From this list of 1,900 words, about 250 words were identified as having a particular Navy or military connotation. These were given simplified definitions as shown in the <u>Glossary of Frequently Used</u> Naval Terms of the workbook.

SELECTION OF CONTENT

Both the Navy personnel and remedial reading specialists agreed that more Navy material should be added to the ART curriculum. More specifically, several military topics were identified as causing recruits difficulty during recruit training (e.g., the Uniform Code of Military Justice, recognition of Navy officers and enlisted personnel, and Navy words, such as the parts of ships). These topics were given particular emphasis in the development of the workbook.

SECTION IV

EVALUATION OF THE WORKBOOK

The workbook was evaluated in two phases. The first phase was conducted concurrently with the original writing. This phase included evaluation of each exercise as well as the overall organization of the workbook through consultation with two kinds of instructional specialists: Navy recruit training personnel and remedial reading specialists.

EXERCISE DEVELOPMENT

As exercises were drafted, they were presented to seven remedial reading instructors and 10 Navy personnel for separate reviews. In addition, ART instructors solicited informal comments from selected students who were asked to work through the exercises. The overall organization of the workbook, and its compatibility with the existing ART curriculum, was coordinated with personnel from the staff of CNTECHTRA having responsibility in this area. Also, professors from Memphis State University, who authored the new ART curriculum under CNTECHTRA contract, were consulted.

All exercises were revised as comments were received. Some exercises in the workbook emerged in final form only after five or six revisions. The many people who participated in this review process are listed in the acknowledgments of the workbook.

DRAFT WORKBOOK REVIEW

Once a draft of the entire workbook was complete, it was reviewed as a package for technical and military accuracy. The same specialists who reviewed separate exercises reviewed the draft workbook. Then it was subjected to standard editorial considerations. In summary, a significant amount of the total effort of producing the workbook was spent in the review process.

FIELD TEST PROCEDURE

A limited number of the workbook was printed for a 2-month field test conducted by the ART staff at RTC Orlando, Florida. Instructors were furnished 150 copies of the workbook and requested to have students use them as a supplement to the regular curriculum. Instructors were also given a questionnaire to complete. The individual instructor responses to the questions are contained in appendix B. In addition to the questionnaire, TAEG received information on workbook use by frequent on-site visits to the ART program and informal interviews with both ART instructors and students.

The results of these actions indicated that the workbook served to motivate recruits, simplified difficult materials, improved reading comprehension, and prepared students for recruit training.

Instructors reported that the workbook was used in a variety of ways. Most students used it for self-study, and many went completely through it from beginning to and with only minimal guidance from the instructor. One instructor reported assigning specific exercises for students with particular

weaknesses. Several military instructors placed special emphasis on exercises dealing with uniforms and Orders to the Sentries to prepare the student for regular recruit training.

Instructors also reported that recruits seemed to enjoy working through the book. The ART students were allowed to keep the workbook upon graduation from ART, and a substantial number of workbooks were used by recruits who were not referred to the ART program. The recruits reported that simplified treatments in the workbook of such subjects as Military Justice allowed easy mastering of the material for the tests given in recruit training.

Comments by both instructors and students indicated that students were interested in the workbook because they realized that working through it would help them to do better when they returned to regular recruit training. While these comments were informal and not documented, they were of equal importance to the questionnaire in the evaluation process.

OUTCOMES TO DATE

Progress in workbook development to date indicates the following:

- . The workbook has proved a valuable addition to the existing ART program. It has filled a need to provide more Navy-relevant material in the curriculum to better prepare ART graduates for regular recruit training.
- The ART curriculum guide issued in August 1979 has incorporated virtually every exercise of the TAEG workbook into the prescriptions used in all five ART modules. The Training Analysis and Evaluation Group has had 1,000 copies of the workbook printed and distributed to the three ART units at the request of CNET (Code N-5) and CNTECHTRA.
- . Acceptance of the workbook by ART students and military and civilian ART instructors has been excellent. Students have shown more interest in using the workbook than any other books in the ART curriculum.
- Most ART students can use the workbook with a minimum of guidance from their instructors.

The content and format of the workbook have been shown to be effective. Currently the Navy is considering establishing remedial programs for class "A" schools and apprentice training schools and also expanding the current ART program. The Army's remedial program, Basic Skills in Education (BSEP), is receiving considerable resources for ongoing development. The TAEG workbook, Improving Your Navy Reading Skills, is a highly relevant prototype for the development of curriculum materials for these programs. In addition, the comprehension section of the workbook may prove useful as a model in developing recruit training curriculum materials. A workbook to be used by recruits would serve as a valuable addition to The Bluejackets' Manual and Basic Military Requirements. It should contain only subject matter that is pertinent

to the successful completion of recruit training, and it should present the material in a simple and readable way. Much of the material could be drawn from The Bluejackets' Manual and Basic Military Requirements and then simplifias was the case in developing the workbook.

In workbook development, a major caution is indicated. Material must be checked carefully to verify accuracy. Even a small number of errors could cause instructors, students, and administrators to question the validity of the entire product.

POST NOTE

At the time the workbook was being tested in Orlando, it was being evaluated for possible use by the Navy's Junior ROTC Program. A decision was made to make the workbook a regular part of the NJROTC curriculum and 10,000 copies are being printed under the auspices of CNET N-162 for distribution during FY 80.

The workbook has been assigned NAVTRA number 37001 and, therefore, is available for future distribution to ART units, Navy Junior ROTC programs, and other potential users as a regular part of the Navy's training materials inventory. In addition, the workbook is being considered as a model for the development of similar materials for the Army and for Navy "A" schools.

REFERENCES

- Basic Military Requirements. Rate Training Manual, NAVEDTRA 10054-D, 1973. U.S. Government Printing Office, Washington, DC.
- Bureau of Naval Personnel. Navy Life: Reading and Writing for Success in the Navy (Book 1). NAVPERS 16134-B (undated).
- Bureau of Naval Personnel. Navy Life: Reading and Writing for Success in the Navy (Book 2). NAVPERS 16156-B (undated).
- Chief of Naval Technical Training. <u>Literacy Skills Curriculum Academic Remedial Training</u>, 31 August 1979. Naval Air Station, Memphis, Millington, TN.
- Dale, E. and Chall, J. S. "A Formula for Predicting Readability and Instructions." Educational Research Bulletin, 1948, 27, 11-20, 28, 37-54.
- Defense Language Institute. Navy <u>Technology Seamanship</u>. Volumes 9600-1, -2, -3, 1975. Defense Language Institute, Lackland Air Force Base, TX.
- Duffy, T. M. "Literary Research in the Navy." In T. G. Stitch and D. W. Zapf (Ed.) Reading and Readability Research in the Armed Services. HumRRO Report FR-WD-CA-76-4, 1976. Human Resources Research Organization, Alexandria, VA.
- Flesch, R. F. "A New Readability Yardstick." <u>Journal of Applied Psychology</u>, 1948, 32, 221-233.
- Fletcher, J. D. "Historical Perspective on Literary Training in the Navy."

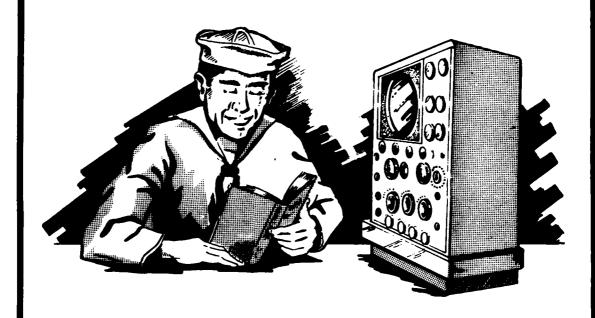
 In T. G. Stitch and D. W. Zapf (Ed.) Reading and Readability Research
 in the Armed Services. HumRRO Report FR-WD-CA-76-4, 1976. Human
 Resources Research Organization, Alexandria, VA.
- Gates, A. I. and MacGinitie, W. H. <u>Gates-MacGinitie</u> <u>Reading Tests</u>, <u>Survey D.</u> New York: Teachers College Press, 1965.
- Government Accounting Office. A Need to Address Illiteracy Problems in the Military Services, 1977. Washington, DC.
- Kincaid, J. P., Fishburne, R. P., Rogers, R. L., and Chissom, B. S. <u>Derivation of New Readability Formulas (Automated Readability Index Fog Count and Flesch Reading Ease Formula) for Navy Enlisted Personnel.</u> CNTT Research Branch Report 8-75, 1975. Chief of Naval Technical Training, Naval Air Station, Memphis, Millington, TN.
- Naval Institute. The Bluejackets' Manual (20th ed). 1978. Naval Institute, Annapolis, MD.
- Plag, J. A. <u>Predicting the Effectiveness of Naval Enlistees</u>. (<u>Tables and Summary of a Report</u>.) June 1968. Naval Medical Neuropsychiatric Unit, San Diego, CA.

- Sansom, R.G. The Language of the Navy in English. New York: Regents Publishing Company, Inc. 1978.
- Sellman, S. "Status of Basic Skills Education Within the Army." Presentation at Army's Basic Skills Education Program, Atlanta, Georgia, September 1979.
- Stitch, T. G., Fox, L. C., Hauke, R. N., and Zapf, D. W. Reading in the Navy. HumRRO Report FR-WD-CA-76-14. 1977. Human Resources Research Organization, Alexandria, VA.

APPENDIX A

IMPROVING YOUR NAVY READING SKILLS WORKBOOK

Improving your NAVY READING SKILLS



ACADEMIC REMEDIAL TRAINING

Prepared by
TRAINING ANALYSIS AND EVALUATION GROUP
ORLANDO, FLORIDA 32813

IMPROVING YOUR NAVY READING SKILLS

Thomas F. Curry, Jr. J. Peter Kincaid

Training Analysis and Evaluation Group Orlando, Florida 32813

Sponsored by
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May 1979

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FOREWORD

This workbook was developed in connection with the Training Analysis and Evaluation Group's (TAEG) Readability Project. The Readability Project was undertaken in response to a requirement of the Chief of Naval Education and Training (CNET) and has as one of its purposes the development of techniques for the improvement of the Navy's Academic Remedial Program (ART).

The workbook is designed to assist Navy recruits assigned to Academic Remedial Training by providing a supplementary collection of reading exercises relevant to the recruit training program. Topics covered in the workbook were selected for relevance to the recruit environment and to the Navy in general. They are intended to provide an introduction to the terms and special definitions common to the Navy vocabulary. Some of the material has been adapted, and simplified, from the two primary references used in recruit training: Basic Military Réquirements (1973) and the Bluejackets' Manual, 20th Edition (1978).

The workbook is based on established remedial reading principles and many of the exercises are similar to those found in commercial materials. However, all exercises in this workbook are designed to teach the student about Navy life while his or her reading skills are being improved. The outline of this workbook is patterned after the primary units of instruction in the Navy's current remedial reading program. The workbook has three main sections: comprehension, word analysis, and vocabulary. Each exercise in the sections is designed for independent completion by the student, with only initial guidance from the instructor. Appendix A provides several exercises designed to be used by classes as a group led by an instructor. Appendix B contains data for the use of instructors and answers to exercises.

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Illustrations in the exercises dealing with recognition of Naval personnel are reproduced from <u>United States Navy Uniform Regulations</u>, NAVPERS 15665C, 1978.

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SECTION I

COMPREHENSION

This section contains passages that will improve your ability to understand what you read. You should also try to improve your reading speed, but do not read so quickly that you have trouble answering the questions. Each passage is supposed to teach you about a topic you will find useful in performing your Navy duties.

A. FOLLOWING DIRECTIONS

WHAT TO DO: Each of these paragraphs tells you something you need to know to be a good sailor. Reading each exercise so you can answer the questions will help you improve your reading skills. There is only one correct answer for each question. Each paragraph is adapted from Basic Military Requirements, 1973.

FIRE WATCH

The duty of a shipboard fire watch is to put out fires caused by welding or cutting torches. When two men are assigned to the watch, one will watch the torch operator. The other will go to the opposite side of the bulkhead or deck in the next compartment. This is because the heat can pass through a bulkhead or deck and set something afire in the next compartment.

- 1. This direction helps you to
 - a. operate a welding torch.
 - b. put out fires.
 - c. perform fire watch duty.
- 2. Using a welding or cutting torch is dangerous because
 - a. it is easily broken.
 - b. it can cause fires.
 - c. it is hard to operate.
- 3. One man is stationed behind the next bulkhead or deck because
 - a. the heat passing through it can cause a fire.
 - b. there is no room in the working space.
 - c. the flame will hurt his eyes.
- 4. The other man will
 - a. take a break.
 - b. watch the torch operator.
 - assist the torch operator.

When you are assigned a fire watch, you will be given a portable fire extinguisher. If you have to use the bottle, be sure you tell the person who issued it. He will see that the bottle is weighed, to tell if it needs refilling.

- 5. When you are on fire watch, you will be issued
 - a. a fire extinguisher.
 - b. a bucket of water
 - c. a fire alarm bell.
- You can tell when a fire extinguisher needs refilling by
 - a. looking into it.
 - b. weighing it.
 - c. turning it upside down.

- 7. If the fire extinguisher needs refilling, tell
 - a. the fire watch.
 - b. the medical officer.
 - c. the person who issued it.
- 8. The fire extinguisher you are issued is
 - a. portable.
 - b. yellow.
 - c. weighs 50 pounds.

HOW TO SCAN WHEN ON LOOKOUT DUTY

The lookout's method of watching the sea and sky around the ship is called scanning. This is a step-by-step method of looking, and it is the only efficient and sure way of doing the job. Scanning does not come naturally; you must learn to scan through practice. In the daytime your eyes must stop on an object to see it. Try moving your eyes around the room or across the water rapidly, and note that as long as your eyes are in motion, you see almost nothing. Allow your eyes to move in short steps from object to object. Now you can really see what is there.

- 1. This direction will help you to
 - a. perform lookout duty.
 - b. use binoculars.
 - c. protect your eyes.
- 2. Scanning is a method of
 - a. listening.
 - b. talking.
 - c. looking.
- 3. You learn to scan by
 - a. watching others.
 - b. practicing.
 - c. reading a book.
- 4. In the daytime, to see an object, your eyes must
 - a. move rapidly.
 - b. stop on the object.
 - c. be half-closed.
- 5. To scan properly your eyes should move
 - a. in short steps.
 - b. up and down.
 - c. steadily across the horizon.

USING SOUND-POWERED TELEPHONES

Because all the power for the phones comes from your voice, you must speak loudly and clearly if your message is to get through. Don't run your words together; make every part of your message stand out clearly. Repeat all messages word for word; if you try to "paraphrase" a message (put it in different words), its meaning may be changed.

Never use the phones while you have gum or food in your mouth. Talk from the front of your mouth, never from the corners. Remember, you must project your voice to every station on the line.

You gain nothing by talking too rapidly; a message spoken slowly, so that it is understood the first time, is better than a message spoken so rapidly that it must be repeated.

- 1. This direction will help you to
 - a. speak better English.
 - b. repair a telephone.
 - c. use a sound-powered telephone.
- Power for the phones comes from
 - a. the ship's batteries.
 - b. your own voice.
 - c. the telephone company.
- 3. In order to be heard, you should
 - a. speak softly.
 - b. speak loudly and clearly.
 - c. speak very rapidly.
- When you send a message, you should
 - a. use your own words.
 - b. talk from the corners of your mouth.
 - c. repeat it word-for-word.

USING PAINT AND VARNISH REMOVERS

Procedures for using all kinds of paint and varnish removers on wood surfaces are the same. Wet the surface with a smooth coat of the remover. Permit it to soak in thoroughly until the paint or varnish is loosened. Then lift the paint off with a handscraper. After the surface is cleaned, wet it again with the remover, and wipe it off with a rag. Finally, wash the surface thoroughly with paint thinner or soap and water. This final rinse gets rid of any wax left by the remover and any acids that may have worked into the grain of the wood.

- 1. When you use different paint and varnish removers, the procedure is
 - a. different for each type.
 - b. the same for each type.
 - c. different for some types.

- 2. The first step in the procedure is to
 - a. wet the surface with water.
 - b. wash the surface with soap and water.
 - c. wet the surface with remover.
- 3. You will wet the surface with remover
 - a. one time.
 - b. two times.
 - c. three times.
- 4. The loosened paint or varnish is removed
 - a. with a handscraper.
 - b. with a rag.
 - c. with soap and water.
- 5. The final rinse removes
 - a. rust.
 - b. loose paint.
 - c. wax and acids.

B. YOUR PAY AND ALLOWANCES

BASIC PAY

Basic pay is the money you get each month. Allowances and special pay are extra. Basic pay is figured on grade and years of service. As an E-1 or E-2 you do not get a raise for years of service. Once you are an E-3 you get a raise for years of service every few years.

Time in the reserves and in the other services counts toward your years of service. If you were in the Army or the Air Force before, this counts. You also count all your years in the reserve even when you were not on active duty.

ALLOWANCES

Clothing

The Navy clothes you were given on your first day of boot camp was an allowance. Each month you will get money for clothing. After 3 years, you will get more money each month.

Quarters

If you do not live in Navy barracks, you get money to pay for quarters. "Quarters" is the Navy word for "housing." If you are married, you get an extra amount of money. But if you must live on base, you do not get any extra pay for housing.

Meals

You are supposed to get three meals a day in the general mess. If your duty is in a place where there is not a general mess, you get extra pay for your meals.

Commuted Rations

Sometimes you will be allowed to eat at other places, even when you could eat in the general mess. When this happens, the amount of money you get equals the value of the meal in the mess.

INCENTIVE PAY

If you do work that is dangerous, you get special pay. You earn this for things like duty aboard a plane or a submarine. You can also get special pay for being a qualified diver.

The amount of special pay you get depends on your grade and years of service.

1. Basic pay

- a. includes allowances.
- b. includes special pay.
- c. is based on grade and years of service.
- d. is based on grade (rate) only.

2. A clothing allowance

- a. is given only once when you enter boot camp.
- b. is given to you each month.
- c. is given only when you are promoted to a higher rate.
- d. always stays the same.

3. "Quarters" pay is given for

- a. the expense of living in the barracks.
- b. expenses while traveling on orders.
- c. housing for persons allowed to live off base.
- d. furnishing your room in the barracks.

4. "Commuted Rations" is pay you receive

- a. when you miss meals while on leave.
- b. when you decide you would prefer to eat in the Base Exchange cafeteria.
- c. when you become a petty officer.
- d. when you are authorized to eat at places other than the general mess.

5. You are entitled to "special (incentive) pay" if you

- a. are married.
- b. are injured on duty.
- c. serve on a submarine.
- d. eat your meals off base.

C. EQUAL OPPORTUNITY AND TREATMENT

The Navy wants each person to be treated the same. Race, color, religion, sex, or place of birth do not matter. Each person has an equal chance for jobs and promotion. This was true in the Navy even before the Civil Rights Act of 1964.

Some persons bring prejudices with them from civilian life. These ideas keep a person from working well on the Navy team. A fighting ship must have good teamwork.

The idea of equality works two ways. It means that a person should not be treated unfairly because he is a member of a minority group. It also means that he or she should not get better treatment than others for the same reason.

If a person is unfairly treated, he or she can file a complaint. He or she cannot be punished for making a just complaint.

Service clubs help to teach all hands to get along together. They are open to all. They provide a good place to go for relaxation. Minority group persons will be welcomed by others. They should not avoid going to the clubs or feel unwanted. Poor service or treatment by employees should be reported.

The Navy does not permit segregation of housing and schools on base. It does not have control of such problems off base. Where this occurs, the base commander may be able to help, by talking to local groups.

Some off-base public facilities may be closed to minority groups. This may be against the law. A complaint can be made by legal action. This can be done through military channels.

Every American has the right of freedom of speech and assembly. He or she can attend civil rights meetings or similar activities. Navy personnel can do these things, but there are certain restrictions. They cannot attend such meetings -

- . during duty hours
- when in uniform (see note)
- . on a military base
- . in a foreign country
- in violation of law and order
- . when violence may result.

NOTE: The Navy person may wear the uniform at church and at meetings on official duty.

- 1. Which of the following statements is true?
 - a. Women in the Navy are not protected by the Civil Rights Act of 1964.
 - b. The Navy is not subject to the Civil Rights Act, because Navy men and women are not civilians.
 - c. The Navy supported equal rights even before the Civil Rights Act of 1964 was passed.
 - d. Equal opportunity cannot be given in a military organization like the Navy.
- 2. If a person thinks he is being treated unfairly
 - a. he can file a complaint.
 - b. he will be punished if he files a complaint, even if it is justified.
 - c. he should keep quiet about it.
 - d. there is no method for filing a complaint in the Navy.
- 3. Which of the following statements is false?
 - a. Prejudice is bad for teamwork.
 - b. Some people bring prejudices with them when they join the Navy.
 - c. Some people should get better treatment than others.
 - d. The Navy wants to eliminate prejudice.
- 4. When there is segregation off the base, the Navy
 - a. can enforce integration in the local community.
 - b. must practice segregation on the base.
 - c. must close the on-base service clubs.
 - d. can try to change the system by talking to local groups.
- 5. Navy personnel are permitted to attend Civil Rights meetings and similar activities in uniform
 - a. when violence may result.
 - b. in foreign countries.
 - c. during duty hours.
 - d. in the U.S., during off duty hours, when violence is unlikely.

D. LEARNING THE NAVY LANGUAGE

The new sailor, or "boot," will find that the Navy has a language of its own. To know what the old hands, or "salts," are saying, he must learn new words.

When the sailor comes aboard a ship, he will bring his "gear." This is his clothing and equipment. He must learn to find his way around the ship. If he is facing toward the front of the ship, the left side is called the "port" side. The right side is called the "starboard" side. The front of the ship is known as the "bow." It is called the "forward," or "fore" part of the ship. If he is told to "lay (go) forward," it means he must go toward the "bow." The rear of the ship is called the "stern" or "aft section." When told to "lay (go) aft," he will go toward the stern. "Amidships" means that part of the ship which lies midway between the bow and the stern.

The sailor will be given a "bunk" (bed) in a "space" or "compartment" (room) in the crew's "quarters" (area). He will go down a "ladder" (stairway) through a "passage" (hallway) to his bunk space. The walls on a ship are called "bulkheads." The ceilings are known as the "overhead." He will find a "head" (bathroom) close by. He will then "stow" (put away neatly) his "gear." On Navy ships and buildings, the floors are called "decks." They are numbered up and down from the main deck, on a ship, and from the ground floor up in a building.

The ship is moved through the water by one or more "screws" (propellers) at the stern. The rear (aft) end of the weather deck is called a "fantail." The sailor will notice lifeboats on the ship, hanging from metal arms called "davits."

A sailor who has been picked to learn a new skill area is called a "striker." If he is told to work in the officers' dining room ("mess"), he will report to the "wardroom." He must know how to handle the ropes and cables used on the ship. A rope is called a "line."

Crew members are called together, and a roll may be taken (a "muster"). They are often given special duties for certain times, called a "watch."

As a ship moves through the water, its speed is measured in "knots." A knot is one nautical mile per hour. A "nautical mile" is a distance used at sea, and is slightly more than a "statute mile" on land. The position of a ship is stated as longitude (east or west of a point on the earth) and latitude (north or south of the equator). The distance from a ship to another ship or place is called the "range." "RADAR" is a type of equipment using radio waves to locate other ships, planes, or objects on the surface or in the air. "SONAR" uses sound waves through the water to locate other objects.

One of many ways ships can signal to one another is by a system called "semaphore." This system involves a sailor moving flags with his arms to send messages.

EXERCISE

The Navy uses many words that will be new to you. Sometimes the words mean the same thing as other words you know. Complete the following statements with the correct Navy word(s) given below:

	Answers to questions	1-6:	
	. stern	. starboard	
	. port	. bow	
	. overhead	. bulkhead	
1.	The <u>left</u> side of t	he ship when facing forward is called the	side.
2.	The <u>right</u> side of	the ship when facing forward is called the	side.
3.	On board ship a wa	ll is called a	
4.	On a ship a ceilin	g is called the	
5.	The rear end of a	ship is the	
6.	The front end of a	ship is the	
	Answers to questions	7-12:	
	. screw	. head	
	. ladder	. passage	
	. fantail	. line	
7.	Stairs or steps ar	e called a	
8.	A bathroom is know	n as the	
9.		is called a	
10.	A rope is called a		
11.		•	
12		a waathar dack is called the	

Answers to questions 13-18:

	. gear . watch					
	. striker . wardroom					
	. muster . davits					
13.	A sailor who is learning a new skill on the job is called a					
14.	A sailor's clothing and equipment is called his					
15.	The officer's mess is called the					
16.	A period of special duty given to a sailor is called a					
17.	The devices from which the lifeboats hang are called the					
18.	To call a group together, or to take a roll, is known as a					
	Answers to questions 19-24:					
	. range . semaphore					
	. latitude . radar					
	. sonar . knots					
	. longitude					
19.	The speed of a ship measured in nautical miles per hour, or					
20.	The position of a ship at sea is measured in and					
21.	The distance from a ship to another ship or object is called the					
22.	The equipment used to locate another ship by radio waves on the surface,					
	or in the air, is called					
23.	The equipment used to locate other ships by sound waves under water is					
	called					
24.	A system of using men with signal flags to send messages to other ships					
	is called .					

E. PERSONAL CONDUCT

As a Navy man or woman you must conduct yourself in a military way. You must learn the Navy's traditions, customs, and speech. There are reasons for the rules and drills. They are needed to insure that the Navy mission is carried out. This will become more clear to you as you do your job.

You should learn what is expected from you. You should look for ways in which you can do your job better. When you do this, you will help the Navy team. This will lead to rewards and promotion. The Navy will train you in new skills when you do your work well.

Navy General Order No. 21 gives rules for your conduct. It explains that in order to get persons to follow the rules, leaders must set an example. This will lead others to act in the same way. You may not be a leader yet, but this will be a way to learn how to be. You can set a good example for others. Obey orders promptly and cheerfully. Do your work well. Do not smoke too much or use alcohol in excess. The mark of a good sailor is not how much he can drink. It does not depend on how long and loud he can swear. He will not win the true respect of others in this way. Your mates will judge you on how well you can do the job and help the team. All your lives may someday depend on it. Here are some rules for a good Navy man or woman:

- . Act in a military seamanlike way.
- Put the good of the ship and the Navy before your own likes and dislikes.
- . Obey the rules of military courtesy and military law.
- . Try to be loyal, honest, self-controlled, and truthful.
- . Know what to do in an emergency, without confusion and with no loss of time.

You must always be aware that people outside the Navy will judge the Navy by the way you look and act. If you want to feel pride in being a Navy man or woman, you must win their respect. This will cause them to have respect for the Navy as well. Be proud, and show your pride in the way you act and wear your uniform. Even if you are in "civies," conduct yourself as a Navy man or woman should.

Your conduct in foreign lands is even more important. In these places the people will be judging the United States by your actions. They will lose respect for the U.S. and its military forces if you and your mates do not set a good example. You must respect their customs and respect them as individuals. You can have a good time, make new friends, and create good will with good conduct. Bad conduct, getting drunk, and damaging property will make enemies, bring you punishment, and hurt the Navy's mission. The laws of foreign countries can be very tough!

A Navy man or woman must have moral standards. This means that he or she knows what is right, and what is wrong. He then tries to do the right thing. He doesn't lie because he knows it is wrong. He knows that it is right to do his job well. Because he knows this, he does it well, and needs no one to keep watch over him.

Rules and regulations are a guide to the best way to do things. They are the result of many years of trial and error. If rules are followed, then every sailor's job is made easier. Following rules also insures the best results from the work of Navy teams.

In any job, the best results come from workers who can take orders and do their duty. On a ship, there is no room for the quitter. Every sailor must do his or her job well, or the mission will fall short or fail. This can often be a matter of life or death.

OUIZ

- 1. The rules for your conduct are given in
 - a. the U.S. Constitution.
 - b. Navy General Order No. 21.
 - c. the Plan of the Day.
 - d. the Bill of Rights.
- 2. The way you look and behave when you are off the base among civilians is
 - a. not important, because they have nothing to do with the Navy.
 - b. not important, unless you are an officer.
 - c. important, because an officer may see you.
 - d. important, because you want their respect for you and the Navy.
- 3. You can choose a person to help you do an important and dangerous job for the Navy. Your best choice would be if
 - a. he or she knows his job, and can be depended upon.
 - b. he or she knows how to have a good time, and can outdrink almost everyone else.
 - he or she doesn't know very much about the job, but won't take any guff, and can swear in two languages.
 - d. You feel sorry for him or her because others think he or she is a goof-off.
- 4. When you are in a foreign port
 - a. you do not have to worry about the local laws because you are in the Navy
 - b. you must tell the people that the American way of doing things is better than their own way.
 - c. you should talk loudly, and demand special service, because you are a Navy man or woman.
 - d. you should show interest in their country, be friendly, and treat them with respect.
- 5. As a member of a ship's crew or company
 - a. you should always do things your own way, because you are smarter than your mates.
 - b. you should put the welfare of your ship ahead of your own likes and dislikes.
 - c. the first rule is to take care of yourself, and not be concerned with the problems of getting the ship's work done.
 - d. if you think your team leader is stupid, just ignore his orders, and do what you think is better.

F. MILITARY TIME

In civilian life, time is measured from midnight to noon, and from noon to midnight. It is a system of two 12-hour periods each day. We number the hours from 1 to 12, and add "a.m." for morning and "p.m." for the afternoon. If the "a.m." or "p.m." are missing, this can cause confusion. Since time must be very exact and accurate in military life, a different system is used - the 24-hour clock. Instead of starting to count again at 12 o'clock noon, we continue to count until we reach 2400 (midnight). In this way, 1 p.m. becomes 1300, 2 p.m. becomes 1400 and so on to 12 p.m. (midnight) which becomes 2400. (Look at the table.)

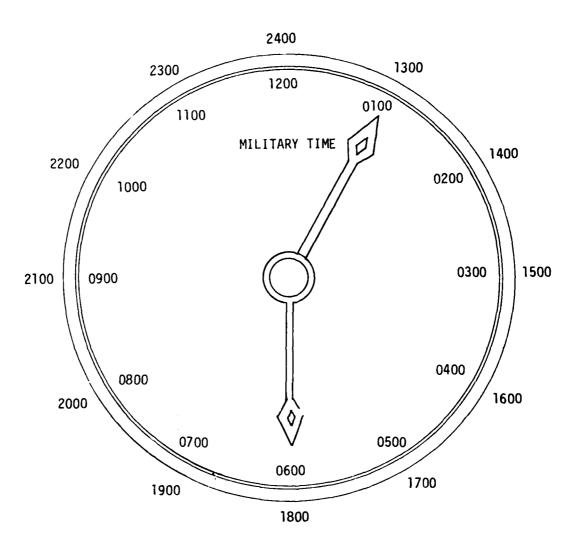
To change civilian time to military time, just add 12 hours to each hour after noon. To convert military time to civilian time merely subtract 12 hours from each hour above 1200 hours. For the morning hours (before noon) the change is easy--for example, 10:00 a.m. becomes 1000 hours.

Here are some other examples:

- 1. 1:25 p.m. (civilian time) + 12 hours = 1325 hours (military time)
- 2. 1325 hours (military time) 12 hours = 1:25 p.m. (civilian time)
- 3. 10:30 a.m. (civilian time) = 1030 hours (military time)
- 4. 9:30 a.m. (civilian time) = 0930 hours (military time)
- 5. 1000 hours (military time) = 10:00 a.m. (civilian time)

You can see a difference in the way military time is written. Notice that there are always $\frac{4}{2}$ digits. When there are only three, as in 8:30 a.m.(civilian time), we add a zero in front to make four, that is, 0830, Sometimes we have to add more zeros, like for ten minutes past midnight (12:10 a.m.) which becomes 0010 hours. We don't have to write "hours" after the military time, unless not doing so would cause confusion.

Military time is also reported (spoken) differently. In civilian time we say "ten o'clock in the morning" or "three o'clock in the afternoon," or "two p.m." and so forth. In military time we just say the <u>numbers</u>; for example 1300 is reported as "thirteen hundred hours"; 0900 is "OH nine hundred hours"; when there are <u>minutes</u>, we say it differently; for example, 1315 is reported as "thirteen fifteen hours," 0940 is "OH nine forty hours" (the word "hours" can be dropped). Look at the <u>table</u> for more examples. It is also correct to use "zero" instead of "OH" - as in "zero nine forty" for 0940.



The 24-Hour Clack

Military 24-Hour Clock Spoken

<u>Civilian lime</u>	Written	Spoken		
12 p.m. (Midnight)	2400	"Twenty-four hundred hours"		
la.m.	0100	"OH one hundred hours"		
2 a.m.	0200	"OH two hundred hours"		
3 a.m.	0300	"OH three hundred hours"		
4 a.m.	0400	"OH four hundred hours"		
5 a.m.	0500	"OH five hundred hours"		
6 a.m.	0600	"OH six hundred hours"		
7 a.m.	0700	"OH seven hundred hours"		
8 a.m.	0800	"OH eight hundred hours"		
9 a.m.	0900	"OH nine hundred hours"		
10 a.m.	1000	"Ten hundred hours"		
11 a.m.	1100	"Eleven hundred hours"		
12 a.m. (Noon)	1200	"Twelve hundred hours"		
1 p.m. +12	1300	"Thirteen hundred hours"		
2 p.m. +12	1400	"Fourteen hundred hours"		
3 p.m. +12	1500	"Fifteen hundred hours"		
4 p.m. +12	1600	"Sixteen hundred hours"		
5 p.m. +12	1700	"Seventeen hundred hours"		
6 p.m. +12	1800	"Eighteen hundred hours"		
7 p.m. +12	1900	"Nineteen hundred hours"		
8 p.m. +12	2000	"Twenty hundred hours"		
9 p.m. +12	2100	"Twenty-one hundred hours"		
10 p.m. +12	2200	"Twenty-two hundred hours"		
11 p.m. +12	2300	"Twenty-three hundred hours"		
12 p.m. (Midnight) +12	2400	"Twenty-four hundred hours"		

When there are minutes past the hour, drop the word "hundred." For example:

10.05	0005	MOULOU Streethannell
12:05 a.m.	0005	"OH OH OH five hours"
1:15 a.m.	0115	"OH one fifteen hours"
5:30 a.m.	0530	"OH five thirty hours"
12:05 p.m.	1205	"Twelve OH five hours"
8:15 p.m.	2015	"Twenty fifteen hours"

The word "hours" is often omitted when it is understood that we are talking about the time of day.

EXERCISE 1

Practice conversion by putting the correct time in the blanks.

Civilian	Military	Military	Civilian
5:30 a.m.		0932	
12 noon		1410	
2 p.m.		2315	
4:15 p.m.		1028	
7:02 a.m.		2400	
8:45 p.m.		0005	
2:58 a.m.		2359	
2:58 p.m.		1200	
12 midnight		1318	
12:15 a.m.		0802	
12:40 p.m.		1732	
4:00 a.m.		0224	,
5 c'clock		1259	
12 o'clock		2113	

EXERCISE 2

What	to do:	Complete	the	blanks	bу	inserting	the	equivalent	time.
						9		•	

1.	1300 is to 1 p.m. as 1400 is to
2.	is to 12 p.m. as 0100 is to 1 a.m.
3.	1500 is to 3 p.m. as is to 4:30 p.m.
Λ	0001 is to 1 minute past midnight as 1201 is to

G. RECOGNIZING OFFICERS

A Navy man or woman is required to exchange salutes with all officers, show respect, and to obey their lawful orders. To do this, the sailor must be able to recognize officers. He must know what marks or badges of rank (called insignia) are worn by U.S. Navy officers.



* LCDR, LT, LT JG, ENS, CWO



CAPTAIN COMMANDER



REAR ADMIRAL



CAP DEVICE

The first thing to look at is the cap (see above). A commissioned officer's or chief warrant officer's cap has a narrow gold strap, just above the visor. The cap device is large, with an eagle with spread wings on the top, above a shield over crossed anchors. Senior commissioned officers will also have gold braid ("scrambled eggs") on the visor.



* LCDR, LT, LT JG, ENS, CWO



CAPTAIN COMMANDER



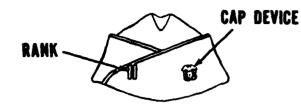
REAR ADMIRAL

Female officers' caps (above) have a different shape, but the cap device and other markings are like those on male officers' caps.

^{*}Lieutenant-Commander, Lieutenant, Lieutenant (Junior Grade), Ensign, Chief Warrant Officer.

MALE

FEMALE



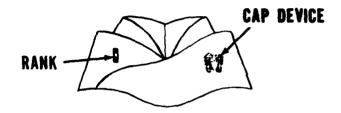


COMMISSIONED OFFICERS' GARRISON CAPS

MALE

FEMALE





CHIEF WARRANT OFFICER GARRISON CAP

FEMALE OFFICER'S BERET

FEMALE OFFICER'S NURSE'S CAP



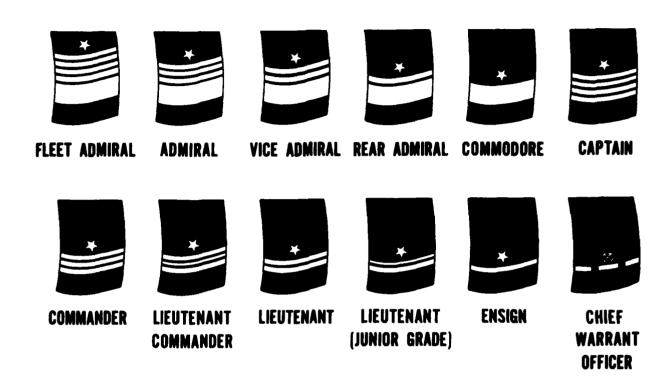


OTHER FEMALE OFFICER CAPS

When the officer is wearing a garrison cap (see above), look for the small officer's cap device on the left side. On the right side, a commissioned officer will wear his insignia of rank, a small metal pin of silver or gold. The insignia shown above is a silver double-bar, for a Lieutenant, U.S. Navy. A chief warrant officer also wears his insignia of rank on the right side of his cap. The female officer's beret has only the small officer's cap device on the left side. As you see, all of these caps will have the small officer cap device on the left side.

There is one exception; the female officer nurse's cap will have rank stripes of gold across the front of her white cap.

Another quick check in recognizing an officer wearing a coat is to look for sleeve stripes.

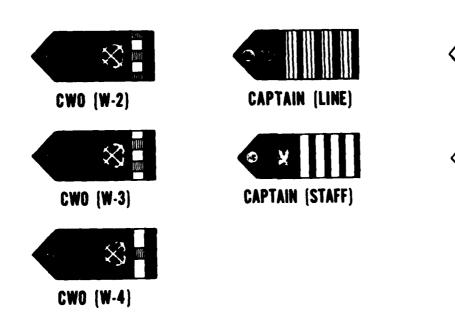


These stripes, of a gold color, are only worn by officers, and are an easy way to identify them. They are in three widths— $\frac{1}{4}$ inch, $\frac{1}{2}$ inch, and 2 inches. A general rule is that the more stripes, and the wider the stripes, the higher the rank. Chief warrant officers wear a $\frac{1}{2}$ inch gold stripe which is broken—the fewer breaks, the higher the rank. Commissioned officers wear a star (line officers) or a corps device (staff corps) above the stripes. Chief warrant officers wear their rating symbol. You can see these stripes even when approaching an officer from the rear.

Officers may also wear <u>shoulder boards</u>, which are similar to sleeve stripes, except for flag officers (commodores and admirals). Here are some examples:

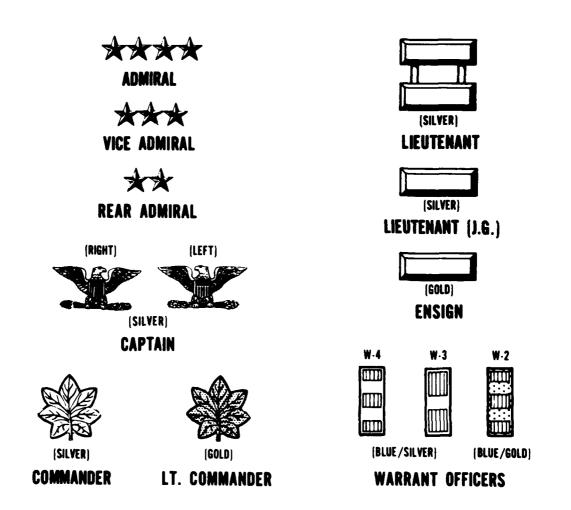
REAR ADMIRAL

COMMODORE



Notice that flag officers wear shoulder boards with a gold background, a silver fouled anchor, and one to five silver stars of rank.

When officers wear a shirt-type uniform, they usually wear their insignia of rank on the collar. These are the rank insignia you should look for:



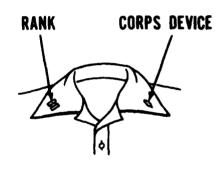
Line officers wear the insignia of rank on both collar points (see below). Staff corps officers and chief warrant officers wear the insignia of rank on the right collar only, with the corps device on the left collar. Therefore, look at the <u>right collar</u> for a quick check for recognizing an officer.





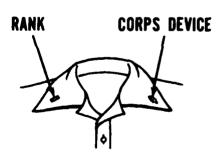
LINE OFFICERS





STAFF CORPS OFFICERS





CHIEF WARRANT OFFICERS

The insignia of rank (above) are also worn on the shoulders of the officer's blue overcoat, blue raincoat, and blue jacket.

There are many other things to be learned about the insignia and badges worn by officers. They will tell you what special skills they have, the type of duty they perform, special assignments they hold. This short exercise is just to help you recognize an officer when you see one, and be prepared to salute and show proper respect. In this way you will win the respect of officers by behaving as a professional Navy man or woman.

CHECKLIST FOR OFFICER RECOGNITION

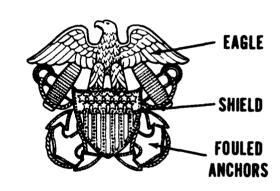
1. LOOK AT HIS OR HER CAP



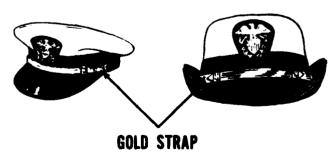


2. DO YOU SEE THIS <u>CAP DEVICE</u>?

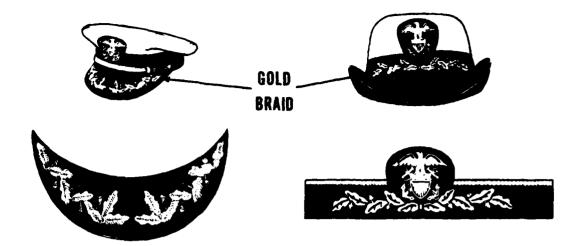
<u>LARGER</u> THAN OTHERS!



3. IS THERE A GOLD STRAP ACROSS THE FRONT?



4. IS THERE GOLD BRAID ON THE VISOR OR HATBAND? [COMMANDERS AND ABOVE]



5. ARE THERE GOLD STRIPES AROUND HIS/HER SLEEVE?







6. IS HE/SHE WEARING SHOULDER BOARDS?









7. IS THERE OFFICER RANK INSIGNIA ON HIS/HER RIGHT SHIRT COLLAR?



If you see any of the above things--SALUTE! It is better to salute by mistake than not to salute an officer.

You must also salute officers of the other military services—the Air Force, the Army, the Marine Corps—and also the Coast Guard. The metal pins of rank are the same as the Navy, but they may have different titles. For example, a Navy commander is the same rank as a Marine Corps, Air Force, or Army lieutenant colonel. Cap devices and other markings are different among the services. You can usually recognize an officer, however, by one or more of the following signs:

- 1. a large cap device
- 2. gold braid on the visor
- 3. shoulder boards
- 4. gold sleeve stripes
- 5. metal pins of rank on shoulders, shirt collars, or garrison caps.

Again, if you are not sure, SALUTE!

Officers of <u>other countries</u> must also be saluted. These are harder to recognize, because their insignia of rank are usually different from ours. However, if you use the above checklist, you will usually be able to recognize a foreign officer.

OUIZ

- 1. To quickly recognize a Navy officer you should check all of the following except
 - a. his cap.
 - b. his shoes.
 - c. his lower sleeve.
 - d. his shirt collar.
- 2. An officer's cap can be recognized by
 - a. a silver strap above the visor (bill).
 - b. a black strap above the visor.
 - c. a gold strap above the visor.
 - d. no strap above the visor.
- 3. An officer's cap device is
 - a. crossed anchors with "USN" in the center.
 - b. an eagle above a shield over crossed anchors.
 - c. an eagle within a circle.
 - d. a silver eagle with the letters "USN."

- 4. A female officer's cap (with visor)
 - a. is the same shape as a male officer's.
 - b. has a different device from the male officer's.
 - c. has the same device as a male officer's cap.
 - d. has no cap device.
- 5. A commissioned officer's coat sleeve has
 - a. one or more short, slanted, stripes between the elbow and shoulder.
 - b. one or more stripes around each sleeve near the wrists.
 - c. chevrons between the shoulder and elbow.
 - d. a stripe around the left sleeve only.
- 6. When you are approaching a person in uniform from the <u>rear</u>, you can identify him as an officer by his
 - a. cap device.
 - b. collar insignia.
 - c. shoulder boards or sleeve stripes.
 - d. cap visor.
- 7. As you approach an officer, you notice that he has a <u>broad</u> stripe on his sleeve near the wrist, with one or more narrow stripes above. You will know that he is
 - a. a line officer.
 - b. an admiral.
 - c. a captain.
 - d. an ensign.
- 8. Which insignia indicates the highest rank?
 - a. silver star.
 - b. gold bar.
 - c. silver oak leaf.
 - d. silver eagle.
- 9. You are approaching a person who is wearing a uniform you don't recognize, but is like that of a Navy officer. You should
 - a. pass without saluting.
 - b. Took the other way.
 - c. salute.
 - d. wait until he salutes you.
- 10. As you walk along, you meet, <u>one after the other</u>; (1) an Air Force Lieutenant; (2) a Navy Captain; (3) a British Major, and (4) a Coast Guard Ensign. You must salute
 - a. the Navy Captain only.
 - b. the Navy Captain and the British Major only.
 - c. the Air Force Lieutenant, the Coast Guard Ensign and the Navy Captain only.
 - d. all of them.

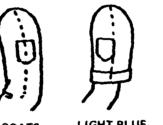
H. RECOGNIZING CHIEF PETTY OFFICERS AND OTHER ENLISTED PERSONNEL

In another exercise, we learned how to recognize Navy commissioned and warrant officers. In this exercise, we will discuss how to recognize Navy enlisted men and women.

There are three groups of Navy enlisted men and women who can be recognized by similar badges and insignia. They are chief petty officers (E7-E9), petty officers (E4-E6), and general enlisted rates (E1-E3). "E" stands for enlisted pay grade—the higher the number the higher the grade. For example, "E1" means recruit, which is the lowest pay grade.

1. Rating Badges.

The easiest way to recognize different rates is to look for the rating badges. These are cloth badges which are worn on the left sleeve of the shirt or jacket, between the shoulder and elbow (see below).



SHIRTS

COATS

LIGHT BLUE JACKET

Chief petty officers' badges show their rate by three chevrons (V-shaped stripes), joined at the top by a rocker or arch, topped by an eagle. A rating specialty mark is worn under the rocker. Senior and master CPO's have one or two stars above the eagle (see below).



CHIEF PETTY OFFICER



SENIOR CHIEF PETTY OFFICER



MASTER CHIEF PETTY OFFICER

Note: On work uniforms and some dress uniforms, chief petty officers (CPO's), wear small metal CPO cap badges on their collars, instead of a rating badge on their sleeve.

To recognize a chief petty officer (CPO) look for

- a rocker above three chevrons
- stars above the eagle (senior and master CPO's)

Petty officers badges have one, two, or three chevrons with a rating specialty mark above, topped by an eagle (see below).



THIRD CLASS



PETTY OFFICER SECOND CLASS



PETTY OFFICER FIRST CLASS

To recognize a Petty Officer (PO) look for:

one to three chevrons (no rocker)

The general rate marks have a square background, and have two or three diagonal stripes. There are different colors for different groups of the general rates. Recruits (E1) do not wear general rate marks.



SEAMAN APPRENTICE



SEAMAN

Cap Devices. There are two different cap devices worn by enlisted personnel; one for chief petty officers, and another for petty officers and lower enlisted rates.

Chief petty officers. The cap device for CPO's consists of a gold fouled anchor, with the silver letters "USN" across the center. One or more silver stars are added above for higher ranking CPO's (see below).



CHIEF PETTY OFFICER



SENIOR CHIEF PETTY OFFICER



MASTER CHIEF PETTY OFFICER



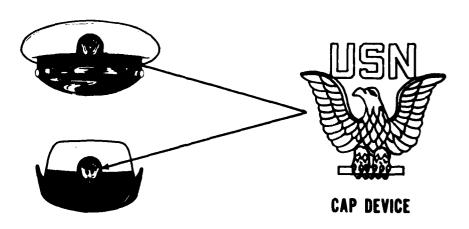
MALE



FEMALE

To recognize a chief petty officer, look for:

- "USN" across a fouled anchor
- . Stars above (senior and master CPO's)
- . Petty Officers and Lower Enlisted Rates (E1-E6). The cap device for all petty officers (except chief petty officers) and rates below petty officer, is a silver eagle, with the letters "USN" above.



PETTY OFFICERS/ENLISTED RATES (E1-E6)

- 3. Chin Straps. All enlisted personnel wear black chin straps on their caps.
- 4. Garrison Caps. Chief petty officers wear the garrison cap with a small metal cap device of their rate pinned on the left side (see below).



MALE



FEMALE

Female petty officers and female lower enlisted rates wear the garrison cap with small metal cap devices of their rate on the left side. Male rates below CPO do not wear the garrison cap. Instead, they wear a baseball-type cap. Petty officers wear small metal rating badges on the front of the baseball cap.



5. Berets. Female CPO's, PO's, and enlisted rates may wear a beret, with the cap device of their rate on the left side.



6. <u>Collar Insignia</u>. On some uniforms, Chief petty officers wear small CPO cap devices on each collar tip. They are not worn by other enlisted personnel.

This exercise is intended to give you some clues to look for, to recognize the different enlisted rates. Rating badges come in different colors with different uniforms, but the designs are as shown above.

- 1. Rating badges are worn
 - a. on both sleeves.
 - b. on the left sleeve.
 - c. on the right sleeve.
 - d. by recruits.
- 2. A rating badge with two stars above an eagle is worn by a
 - a. Petty officer first class.
 - b. Master chief petty officer.
 - c. Seaman apprentice.
 - d. Senior chief petty officer.
- 3. Which group of Navy personnel can be recognized by a rocker above the chevrons?
 - a. Petty officers (E4-E6).
 - b. Recruits.
 - c. Group rates (E1-E3).
 - d. Chief petty officers (E7-E9).
- 4. As you approach a Navy man, you see that he has a cap device with the letters "USN" above an eagle. This tells you that he is
 - a. a petty officer or group rate enlisted man or woman.
 - b. a petty officer or chief petty officer.
 - c. a commissioned officer.
 - d. a warrant officer.
- 5. The letters "USN" \underline{across} a fouled anchor on a cap device tells us that the person is
 - a. a petty officer or chief petty officer.
 - b. a chief petty officer.
 - c. a petty officer or group rate.
 - d. a seaman.
- 6. The garrison cap is not worn by
 - a. female petty officers.
 - b. male petty officers.
 - c. female group rates.
 - d. chief petty officers.
- 7. When the baseball-type cap is worn by a petty officer, what is worn on the front?
 - a. a cloth rating badge.
 - b. an enlisted cap device.
 - c. a small metal rating badge.
 - d. nothing.

- 8. A female chief petty officer approaches, wearing a beret. What cap device will she wear?
 - a.
 - an eagle, with "USN" above. a fouled anchor, with "USN" across it. b.
 - a small metal rating badge. C.
 - 1. none.
- 9. The rating badge for a seaman is
 - three stripes on the lower left sleeve.
 - three chevrons on the upper left sleeve. b.
 - c. three stripes on the upper left sleeve.
 - d. three chevrons on the lower left sleeve.

1. RECOGNIZING COMMISSIONED OFFICER, CHIEF PETTY OFFICER, AND PETTY OFFICER UNIFORMS

During your Navy duty, your supervisors will be petty officers (PO's), chief petty officers (CPO's), and commissioned officers. It is important that you are able to recognize each of these, because some have more authority than others. For example, you must be able to recognize an officer and salute him, and to recognize the highly experienced CPO.

To help you, we have provided a series of charts, which point out the differences in uniform markings among the three groups. Not all uniform combinations are shown--only those which are more likely to be seen in your working area.

Since uniform regulations are often changed, some of these uniforms may have been changed by the time you read this. However, the identifying markings should be the same.

PETTY OFFICER

OFFICER CAP DEVICE

GOLD CHIN STRAP

SERVICE DRESS BLUE

RANK STRIPES (LIEUTENANT)

39

SERVICE DRESS BLUE "A"
(ALPHA)

SERVICE DRESS BLUE "A" (ALPHA)

SERVICE DRESS BLUE "A" (ALPHA)

41

PETTY OFFICER

- OFFICER RANK INSIGNIA (LIEUTENANT)

OFFICER CAP DEVICE

-CPO CAP DEVICE

ENLISTED CAP DEVICE

GOLD CHIN STRAP or gold braid

SERVICE DRESS LIGHT BLUE

SERVICE DRESS LIGHT BLUE

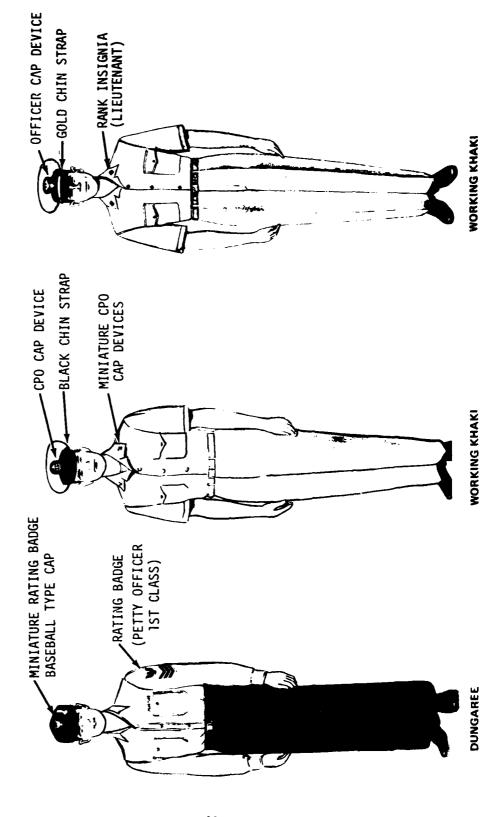
SERVICE DRESS LIGHT BLUE

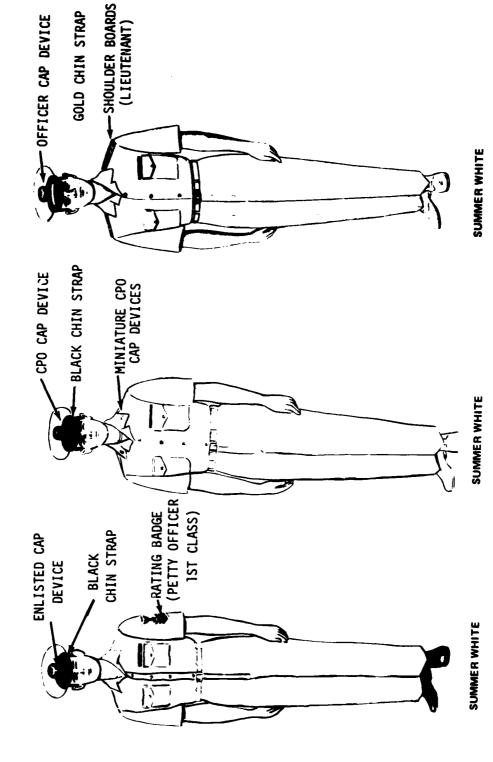
42

PETTY OFFICER

CHIEF PETTY OFFICER

COMMISSIONED OFFICER





J. NAVAL HISTORY AND TRADITION

You are now a part of the world's greatest sea power--the United States Navy. You should know that men and women like you have served with skill and courage. You should understand why your job is important. Our Navy today is strong because it has a spirit of pride. This spirit and pride is based on good leadership and deeds of valor. We also take pride in our ships, crews, and equipment. They are the best.

Even before our country was born, Americans served and fought well at sea. Our Navy was born during our war for freedom from Britain. John Paul Jones was one of our great early leaders. He set an example for all men and women who have since served in the Navy. He believed in devotion to duty and country. He is known for his firm but fair leadership.

With the help of the French Navy, our war for independence was won. Our small Naval forces helped to achieve this goal. In 1798 the U.S. Navy Department was officially organized.

The Navy has become a great sea power through four major actions. An important early action was when it opened Japan to world trade in 1853. This was done by a visit by a U.S. fleet under Commodore Perry. This event led to the need for a strong Navy to protect these new trade routes.

Another major event in U.S. Naval history was the "Great White Fleet" of 1907. At this time, the bulk of the Navy's fleet was sent on a grand tour around the world. Sixteen battleships and many supporting ships, all painted white, were sent on a good will mission. They sailed 46,000 miles in 14 months, to many ports. They were welcomed everywhere, and brought pride to our nation. The tour was planned to show the power of U.S. Naval forces.

The next major action was to modernize the Navy. In 1910 the first plane was landed on a ship. At this time the Navy began to use oil instead of coal for fuel. The use of electric power, submarines, and radio was also begun.

The most recent major advance in the Navy is the use of nuclear power for ships of the fleet. In 1954 the first nuclear-powered vessel, the submarine Nautilus, was built. Today there are over 100 nuclear-powered ships. These include both surface ships and submarines. Many are equipped with nuclear weapons.

The Navy has served our country well in time of war. Following the Revolution, the first test of our new nation was a conflict with France in 1798. It was mostly a naval war, in which we proved we could defend ourselves.

In 1801 our Navy took action against the Barbary Coast countries in the Mediterranean. These countries had been paid not to seize our trade ships. A series of land and sea actions were carried out by the Navy. By these actions, our shipping was made secure from such threats. Lieutenant Steven Decatur is known as a hero of this war. He and his men kept a disabled U.S. ship, the "Philadelphia," out of enemy hands by burning it in the enemy harbor.

The war of 1812 was fought to protect our merchant ships and men from seizure by Britain. Our small Navy fought bravely against great odds. On Lake Erie and Lake Champlain it turned back British invaders from Canada. These Navy actions helped the U.S. to gain a just peace treaty.

A short war was fought with Mexico in 1846-1848. There was very little naval action in this war. However, one of the first amphibious landings was made when soldiers and marines were put ashore at Vera Cruz.

The Navy had a much larger role in the Civil War. Its main task was to blockade the South. At this time great changes took place. Steam power and sails were both being used to power ships. Later, steam power completely replaced sails. Explosive shells were a powerful weapon used against wooden ships. Iron began to be used in place of wood to build and armor ships.

During this war, many new events took place. Two ironclad ships fought for the first time, using guns mounted on movable platforms, or turrets. They fired shells instead of cannonballs.

In 1898 the Spanish-American War broke out. Control of the sea was the key to victory. The U.S. Fleet under Commodore Dewey defeated the Navy of Spain at Manila Bay. Another major U.S. Navy victory was near Cuba. The lessons learned from these battles showed the need for better gunnery. More training was added to improve this skill after the war.

World War I (1914-1918) was marked by great battles at sea as well as on land. At sea the German submarine (U-Boat) became a deadly weapon. It was used to attack and sink Allied shipping. American ships were also sunk, which was one cause for U.S. entry into the war in 1917. The "convoy" system of the U.S. and its allies used warships to escort unarmed ships. In this way, we were able to overcome the U-Boat threat. U.S. and Allied navies gained control of the sea lanes. This kept supply routes open, and made the land victory possible.

During the years following World War I, the Navy continued to change. The Fleet began to use oil for power instead of coal. Our submarine force and naval air force grew in size and strength. The first aircraft carriers were built for use by the Fleet.

Japan's attack on Pearl Harbor in 1941 brought the U.S. into World War II. Much naval action was in the Pacific. Although hit hard, Navy ships and planes fought back to win control of the sea lanes. They moved Army troops and Marines against islands held by Japan. Many new types of ships were used with success. Convoys moved men and supplies great distances.

In Europe, the Navy helped to mount the great invasions of North Africa, Italy, and France. It fought the German U-Boats and planes to keep supply lines open.

It was a time of great expansion for the Navy. Construction battalions ("SEABEES") were formed, to build and defend airfields and bases. Eighty thousand women served in the Navy during the war. Hundreds of new ships, of all kinds, were built, including many new types of landing craft.

In 1950 the Korean War began. In this war the Navy role was to support United Nations land forces (mostly consisting of U.S. forces). The Fleet conducted air strikes, attacked shore targets, and moved troops ashore. U.S. jet planes were used in combat for the first time. The war was enlarged by the attack by Red China. Navy helicopters played a vital role in saving lives. This war ended with a ceasefire in 1953.

In 1961 the Navy was used in the Cuban Blockade. Fleet vessels were used to turn back ships of the USSR (Russia) carrying missiles to Cuba. This action caused the USSR to back down and withdraw its missiles.

Many World War II ships saw action again in Vietnam (1964-1973). This was a new kind of war. It was fought against guerrillas, who used both primitive and modern weapons. The Navy 7th Fleet tasks included:

- . protecting South Vietnam from attack by North Vietnam by sea
- . guarding U.S. supply lines
- . air strikes against enemy targets
- . mine-laying of enemy harbors
- . close air support for Marines and Army.

Today's Navy faces the threat of the rapidly growing Navy of the USSR. The ships of the USSR face U.S. Navy ships in every ocean of the world. At no time in U.S. history has there been a greater challenge for Navy men and women.

QUIZ

- 1. Naval forces first defended what is now the United States during
 - a. the Civil War.
 - b. the War for Independence.
 - c. the Spanish-American War.
 - d. the War of 1812.
- 2. The "Great White Fleet" was sent around the world in 1907 to
 - a. show the power of the U.S. Navy.
 - b. open Japan to trade.
 - c. defeat the Spanish Fleet.
 - d. punish the Barbary Coast countries.

- 3. The man who, in the first days of the Navy, set an example for all Navy men and women, was
 - a. Admiral Dewey.
 - b. Commodore Nelson.
 - c. Douglas MacArthur.
 - d. John Paul Jones.
- 4. Lt. Steven Decatur is known for his bravery during the
 - a. war with the Barbary Coast countries.
 - b. Korean War.
 - c. War for Independence.
 - d. First World War.
- 5. In 1910 the U.S. Navy began to use
 - a. nuclear submarines.
 - b. steam power.
 - c. oil instead of coal.
 - d. steam instead of sails.
- 6. The first U.S. Navy ships made of iron were used during the
 - a. Civil War.
 - b. Spanish-American War.
 - c. Korean War.
 - d. World War II.
- 7. The U.S. Navy victories at Manila Bay and near Cuba led to the defeat of the Navy of
 - a. Spain.
 - b. Great Britain.
 - c. France.
 - d. Japan.
- 8. Lake Champ.ain and Lake Erie were the scene of Naval battles during
 - a. the Civil War.
 - b. the war with Mexico.
 - c. the War of 1812.
 - d. the Spanish-American War.
- 9. What lesson was learned from the Spanish-American War?
 - a. the need for iron-clad ships.
 - b. the need for better gunnery.
 - c. the need for faster ships.
 - d. the need for better communications.

- 10. The most deadly weapon used by the Germans against shipping in World War I was
 - a. the submarine.
 - b. the bomber aircraft.
 - c. long range guns.
 - d. destroyers.
- 11. U.S. Navy jet aircraft were used in combat for the first time during
 - a. the Korean War.
 - b. the War in Vietnam.
 - c. World War II.
 - d. World War I.
- 12. During the Cuban Blockade of 1961, the Navy was used to turn back missile-carrying ships of
 - a. Cuba.
 - b. Spain.
 - c. the USSR (Russia).
 - d. Germany.
- 13. In World War I the threat to U.S. and allied shipping was overcome by the use of
 - a. the convoy system.
 - b. submarines.
 - c. patrol aircraft.
 - d. new types of torpedoes.
- 14. The SEABEES' main task during World War II was
 - a. attacking enemy bases.
 - b. supplying ships at sea.
 - c. constructing airfields and bases.
 - d. shipbuilding.
- 15. During the Korean War, United Nations forces were attacked by
 - a. Japan.
 - b. Red China.
 - c. the USSR.
 - d. Vietnam.
- 16. The greatest threat to the U.S. Navy today is the Navy of
 - a. Japan.
 - b. Germany.
 - c. Iran.
 - d. the USSR.

- 17. The Navy leader who is given credit for opening Japan to trade in 1853 was
 - Admiral Halsey. John Paul Jones. a.
 - b.
 - Commodore Perry. С.
 - Admiral Dewey. d.

K. MILITARY JUSTICE

When people live and work together in groups, laws are needed. These laws are to make sure that everyone is treated fairly, and are made for the benefit of all. When you were a civilian, you were ruled by laws. These were the laws of your city, county, state and the federal government. The Navy also has special laws which you must obey. As a sailor, you have rights and duties under both military and civilian law.

Military law is based on a set of rules called the Uniform Code of Military Justice (UCMJ). These are rules which were set up by the U.S. Congress especially for the military services. They must be read and explained to you. It is your responsibility to know these rules - ignorance is no excuse.

Some of the most important rules, called "articles," are explained below:

- Article 137. Lists the articles which must be explained to enlisted members at the time of enlistment, after 6 months, and at reenlistment.
- Article 2. Explains who is subject to the UCMJ. It includes all persons on active duty, certain retired persons, prisoners, and prisoners of war (POWs).
- Article 3. States that a person may be tried by court-martial, even after leaving the service, for offenses committed while under the UCMJ.
- Article 38. Outlines the rights of an accused to be aided by a civilian or military lawyer. However, he must pay a civilian lawyer.
- Article 92. States that a person can be tried for failure to obey a lawful general order or regulation, or other order issued by superiors, when it is known, and when the duty to obey is known. He must also carry out the order correctly.
- Article 31. Explains your right not to provide evidence against yourself (self-incrimination), a right given to all citizens under the Fifth Amendment to the U.S. Constitution.
- You cannot be forced to answer questions or give evidence which may help to prove your guilt.
- You must be told the nature of the offense of which you are accused; that you do not have to make any statement; and that if you do, it can be used against you.
- . You cannot be forced to make a statement, or give evidence in a trial, which is not related to the case, or which may degrade you.
- . No statement obtained from you by threats or trickery can be used against you in a court-martial trial.

- Article 98. States that a person who unnecessarily delays an accused's trial, or fails to enforce or comply with the UCMJ procedures, may be punished by court-martial.
- Article 84. States that if a person knowingly aids another person to enlist, be appointed, or separated, through fraud, he will be punished by court-martial.
- Article 15. Explains commanding officer's "nonjudicial punishment." For some offenses, commanders may offer an "Article 15" instead of court-martial. If accepted, he may impose punishment as permitted by regulations (usually at captain's mast). This is not a conviction, and does not give a criminal record.
- Article 55. Flogging, branding, marking the body, or any other cruel and unusual punishment is prohibited.
- Article 76. A person who knowingly receives, comforts, or assists an offender in order to hinder or prevent his apprehension, trial, or punishment will be punished by court-martial (accessory after the fact).
- Article 81. Any person who conspires with another person to commit an offense is guilty of conspiracy.
- Article 85. Members of the armed forces who, without permission, leave their place of duty or organization, with the intent to remain away permanently, are guilty of desertion.
- Article 86. A person who, without permission fails to go to or remain at his place of duty at the time prescribed is absent without leave (AWOL). It does not matter whether it is intentional or nonintentional. In the Navy, this is called unauthorized absence (UA).
- Article 87. A person who, through neglect or on purpose, misses the movement of his ship, aircraft, or unit is guilty of missing movement.
- Article 89. Any person who behaves with disrespect towards a superior commissioned officer will be punished by court-martial.
- Article 90. A person who intentionally strikes or threatens a superior commissioned officer is in violation of this article.
- Article 91. Any person who strikes, assaults, or willfully disobeys a lawful order of, treats with disrespect in language, or is contemptuous towards a warrant officer, non-commissioned officer, or petty officer shall be punished by courtmartial.
- Article 107. This article deals with the offense of signing a false official statement.
- Article 108. This article deals with the loss, damage, destruction, selling, or wrongful disposition of military property.
- Article 111. This article deals with penalties for drunken or reckless driving. "Drunk" is defined as intoxication by drugs or alcohol.

Article 115. Malingering is an offense defined as any act to avoid duty by pretending to be ill or physically or mentally disabled.

Article 132. Deals with frauds against the United States. It pertains to making false claims against the government to obtain money or property.

The UCMJ requires that you obey the <u>lawful</u> orders of superior commissioned officers, warrant officers, and petty officers. What is a lawful order? When is an order unlawful?

First, you should always assume that an officer's or petty officer's orders are lawful, and obey them promptly. If you do not, you place yourself in very serious trouble. Successful military operations depend upon quick and eager response to orders, and this habit must be so automatic that, in times of stress or combat, all tasks will be done quickly and efficiently. If an order is to be questioned, it must be done later - after it has been carried out. The only exception would be when an order is issued by mistake, and could result in injury or death.

A <u>lawful</u> order is an order to do, or <u>not</u> to do, something, usually a specific act. It must be related to <u>military duties</u>. (These are duties which are reasonable and necessary to protect or improve the morale, discipline, and usefulness of persons in a military unit.)

Orders may be general orders, or regulations, assignment of special duties (watch bills), or spoken or written orders from officers or petty officers. Orders may also be given by persons of lesser rank on guard duty or when in charge of a detail.

<u>Unlawful</u> orders are those which are forbidden by the U.S. Constitution or Acts of Congress, or which contradict orders of superiors. (For example, a petty officer cannot give an order to do something which is forbidden by command regulations.)

QUIZ

- Punishment given by Commanding Officers for minor offences (Article 15 punishment) is called
 - a. nonjudicial punishment.
 - b. court-martial punishment.
 - c. cruel and unusual punishment.
 - d. confinement punishment.
- 2. The Uniform Code of Military Justice (UCMJ) is a list of rules established by
 - a. the Navy.
 - b. the U.S. Congress.
 - c. the President.
 - d. the CNO.

- 3. The UCMJ governs the conduct of
 - a. all U.S. citizens.
 - b. the Navy only.
 - c. the Army only.
 - d. all military personnel.
- 4. During a sailor's first year in the Navy, the UCMJ must be explained to him at least
 - a. once.
 - b. twice.
 - c. three times.
 - d. none of the above.
- 5. Navy personnel who do not report to their assigned place of duty at the scheduled time, or leave their unit without permission (temporarily), are guilty of
 - a. insubordinate conduct Article 91.
 - b. conspiracy Article 81.
 - c. malingering Article 115.
 - d. absence without leave (unauthorized absence) Article 86.
- 6. Navy personnel who, without permission, leave their place of duty, intending to remain away permanently, are guilty of
 - a. desertion Article 85.
 - b. mutiny Article 94.
 - c. false official statements Article 107.
 - d. failure to obey an order Article 92.
- 7. The offense in which a recruiter enlists someone whom he knows is not eligible is called
 - a. cruel and unusual punishment Article 55.
 - b. unlawful enlistment Article 84.
 - c. unlawful detention Article 97.
 - d. fraudulent enlistment Article 83.
- 8. The UCMJ article which is based upon the 5th Amendment to the U.S. Constitution is
 - a. missing movement Article 87.
 - b. absence without leave (unauthorized absence) Article 86.
 - c. persons subject to the UCMJ Article 2.
 - d. compulsory self-incrimination prohibited Article 31.
- 9. The article which directs that certain articles of the UCMJ be reviewed with enlisted personnel at certain times is
 - a. general article Article 134.
 - b. articles to be explained Article 137.
 - c. frauds against the U.S. Article 132.
 - d. noncompliance with procedural rules Article 98.

- 10. A person who avoids duty by pretending to be ill or disabled is guilty of
 - a. desertion Article 85.
 - b. absence without leave (unauthorized absence) Article 86.
 - c. malingering Article 115.
 - d, failure to obey an order Article 92.
- 1]. A sailor who misses the movement of a ship, aircraft, or his unit, through neglect or on purpose, is guilty of
 - a. conspiracy Article 81.
 - b. desertion Article 85.
 - c. absence without leave (unauthorized absence) Article 86.
 - d. missing movement Article 87.
- 12. The petty officer of your office tells you that you must work overtime, but you refuse and go to your quarters. You are guilty of
 - a. disrespect toward superior commissioned officer Article 89.
 - b. insubordinate conduct toward a petty officer Article 91.
 - c. failure to obey a published order or regulation Article 92.
 - d. assaulting or willfully disobeying a superior commissioned officer -Article 90.
- 13. The petty officer in charge of your division or training unit gives you an order you do not like. As a result you strike him with your fist. You may be prosecuted for
 - a. assault.
 - b. conspiracy.
 - c. absence without leave (unauthorized absence).
 - d, manslaughter.
- 14. Which of the following types of punishment will not give you a criminal record?
 - a. general court-martial.
 - b. non-judicial punishment.
 - c. special court-martial.
 - d. summary court-martial.
- 15. Article 31 compulsory self-incrimination prohibited gives the sailor the right
 - a. to give information that can be used against him.
 - b. to refuse cruel and unusual punishment.
 - c. to determine who sits on his court-martial panel.
 - d. not to give information that can be used against him.

MILITARY JUSTICE VOCABULARY

When you study military justice, you will need to know many words and phrases having special meanings. Some of these are explained below:

<u>UNIFORM CODE OF MILITARY JUSTICE (UCMJ)</u>. Rules set up by the Congress for the military services. It tells military people what things they must not do, and how they will be treated if they do them. It also tells them what their rights are. There are 140 articles on different subjects.

ABSENCE WITHOUT LEAVE (UNAUTHORIZED ABSENCE). When a person does not report for duty at the time he is supposed to, or leaves his place of duty without permission. If he cannot prove that he intended to return, he can be charged with desertion. Missing a bus or plane, or otherwise accidentally or carelessly being late in returning, is no excuse. If this happens, he must notify his supervisor as soon as possible.

ACCESSORY. A person who helps another person to break the UCMJ rules. Also, if you know that another person has broken the rules, and you keep quiet about it, or help to cover it up, you become an ACCESSORY AFTER THE FACT, and can be punished.

APPREHENSION. Catching someone who has, or is believed to have broken the rules of the UCMJ.

ARREST. When an offender is caught and loses his freedom.

ASSAULT. When someone threatens another person, with or without a weapon. If the other person is hit, or hurt, it is called battery.

COERCION. ("Co-er-shun") Making a person do something by threatening him.

CONFINEMENT. When an offender is locked up in jail, or the brig.

CONSPIRACY. When two or more people plan together to break the rules.

COUNSEL. A lawyer.

COURT-MARTIAL. A military court of law. To be "court-martialed" means to be tried by a military court. There are three types: summary, special and general.

DESERTION. Leaving your place of duty without persmission, and not planning to return.

DISRESPECT. Rudeness toward commissioned or petty officers, including not saluting, or talking back.

EVIDENCE. Facts told to a court to find out if a person on trial is guilty or innocent.

EXTORTION. (BLACKMAIL). Using threats to get something valuable from another person.

FRAUD. Using lies or trickery to get something valuable from another person.

INSUBORDINATE. Being disrespectful to superior officers or petty officers.

INTENTIONAL. Something that is planned.

JURISDICTION. The area, or group of persons, over which a court has control.

LARCENY. Stealing or borrowing something and keeping it. (Wrongful appropriation is taking something not your own - but returning it).

MALINGERING. Pretending to be sick to get out of work.

MISSING MOVEMENT. When a sailor misses the departure of his ship, unit, or aircraft.

NONJUDICIAL PUNISHMENT. Punishment for minor offenses given by the violator's commanding officer at Captain's Mast. The punishment is usually minor, and no criminal record is made.

PANEL. Persons who carry out a court-martial trial; they are like judges.

PERJURY. Lying under oath at a trial (a very serious offense).

PROSECUTE. Trying to prove that a person being tried by a court is guilty.

<u>RESTRAINT</u>. When a person is not free to come and go while he is being investigated. The three forms of restraint are: arrest, confinement, and restriction-in-lieu-of-arrest.

RESTRICTION. A type of restraint--the person performs his regular duties, but has to stay on base or in quarters.

SEDITION. When you encourage other persons to fight or resist lawful authority. (To actually carry it out is mutiny.)

<u>SELF-INCRIMINATION</u>. Giving information about yourself which may be used to prove your guilt at a trial. According to the Fifth Amendment of the U.S. Constitution, you do not have to do this--you can remain silent.

SOLICITATION. Trying to get another person to mutiny or desert.

TESTIMONY. Evidence given by persons at a trial or hearing.

UNAUTHORIZED ABSENCE (UA). (Same as absence without leave) When a person is absent from his place of duty through his own fault, even by accident, but when it seems that he plans to return. If he cannot prove he planned to return, it will be called desertion, a very serious charge.

SECTION II

WORD ANALYSIS SKILLS

This section will help you learn about the different parts of a word such as vowels and consonants. Once you know the parts you can put them together to recognize a word.

A. CONSONANTS PUZZLE

WHAT TO DO:

This is a ladder crossword puzzle. The vowels are already in the puzzle. Your job is to fill in the consonants by picking words that fit the definitions. The list of words below contain all of the right answers.

DOWN

- 1. Where military activities are located.
- 2. Good or proper behavior.
- 4. The Continental United States (abbreviation).
- 5. Bravery.
- 7. Uses radio beams to locate.
- 8. Steel, copper or brass.
- 10. Some Navy ships run on nuclear .
- 11. Used in navigational devices.

civil	labor	bases
valor	naval	color
major	moral	ropes
davit	radar	CONUS
gyros	sonar	focus
metal	water	power

ACROSS

- 3. Uses sound waves to locate.
- 6. Your type of military service.
- 9. Lifeboats hang from this.
- 12. Ships travel in this.

	_	
1]	2
A		0
3	OA	
A 3 E		A
4 0 6 u		5
4		5
0		A
6	AA	
u		0
		777
7		[®] E
A 9		E
9	AI	
A		A
10		11
10 O 12 E		Y
12	AE	
E		0

B. CONSONANT BLENDS

Consonant blends are two or three consonants that are together in a syllable. Each consonant keeps its own sound.

Example: cl: class, enclose

Note: "uncle" is not an example, because the \underline{c} and \underline{l} are

not pronounced together.

<u>tr</u>: <u>troop</u>, <u>transport</u> <u>scr</u>: <u>screw</u>, <u>screen</u>

Notice that the position of the blend is not important; however, they must be in the same syllable.

WHAT TO DO: Match the following underlined blends to their identical blends. There is only one correct answer for each. Circle a, b, or c, for the correct answer.

1.	crew	a.	cargo	b.	crane	c.	chart
2.	<u>Propeller</u>	a.	port	b.	parachute	c.	provision
3.	detachme <u>nt</u>	a.	cent	b.	fantail	c.	sentry
4.	<u>gr</u> ade	a.	gyro	b.	graduate	c.	guard
5.	ho <u>ld</u>	a.	could	b.	sold	c.	soldier
6.	<u>st</u> ation	a.	moisture	b.	muster	c.	starboard
7.	wi <u>ng</u>	a.	unguarded	b.	language	c.	signal
8.	bla <u>st</u>	a.	mist	b.	pistol	c.	muster
9.	screw	a.	secure	b.	scrub	c.	sector
10.	instrument	a.	star	b.	stern	c.	strategic
11.	ra <u>nk</u>	a.	bunk	b.	unkempt	c.	knot
12.	hit <u>ch</u>	a.	anchor	b.	launch	c.	chevron
13.	<u>dr</u> aft	a.	hydraulic	b.	wardroom	c.	door
14.	po <u>rt</u>	a.	wartime	b.	desert	c.	rating
15.	rati <u>ng</u> s	a.	range	b.	insignia	c.	sang

C. COMPOUND WORDS

Exercise 1

YOU NEED TO KNOW: Sometimes we put two words together to make another word. We call this new word a compound word. Some compound words have a hyphen, like this: one-half; some have no hyphen, like high school; and some are written as one word, like southwest.

WHAT TO DO: After each blank in the sentences below is half a compound word. You will find the missing part on the list above the sentences. Write the correct word in each of the blank spaces to form the correct compound word.

		over	fan	fore				
		star	ward	top				
		bulk	quarter	amid				
1.	The officers'	dining room on a ship	p is called a	room.				
2.	The sailor who	helps the navigator	is called the	master.				
3.	The middle par	t of a ship is called	d theships	. .				
4.	The right hand	side of a ship is t	heboard si	de.				
5.	Your bunk is p	olaced against the	head.					
6.	The	tail is located at t	he aft end of the sh	ip.				
7.	On a ship, the	e ceiling is called th	hehead.					
8.	The main deck	is called the	side.					
9.	The	castle is located at	the bow of the ship.					
make will	WHAT TO DO: Each sentence below has two words which can be put together to make a compound word that will finish the sentence. The first two sentences will give you a clue. Write the word in the blank space. (Tip: look at the underlined words)							
	Example: In stil	baseball , if a land to touch each i	batter hits a <u>ball</u> ou base.	ut of the park he				
10.	When the sails life.	or fell from the <u>boat</u>	, a was se	ent to save his				
11.	Thev	was told to <u>look</u> very	carefully <u>out</u> to sea	ı.				
12.	When the fleet	went into <u>battle</u> , t	he most powerful <u>shi</u> p	was the				

13.	The Navy has many basesto watch <u>over</u> enemy ships on all the <u>seas</u> .
14.	The gang of sailors made their way to the ship and walked up the
15.	Helms are the wheels which steer ships; the man who controls one is the
16.	The man on watch received a <u>signal</u> from the of another ship.
17.	The boatswains' mate saw a from his ship.

Exercise 2

WHAT TO DO: Use as many words as you can from List A to make compound words with the words in List B below. Try to make a compound word for each blank space.

Example: List A: father, mother

List B: grand grandfather (1), grandmother (2)

Note: Sometimes the compound word will begin with one of the words in List A. Other times the compound word may begin with the word in List B. Write each compound word next to the List B word.

			LIST A	
		over stern helms free low plane top loft gang	castle signal bulk lay out quarter(s) passage broad borne	craft mast in drift fire companion star beam float
			LIST B	
1.	Head			
2.	Board			
				
3.	A			
4.	Air			
5.	Ве		-	
6.	Fore			
7.	Side			
8.	Man			····
9.	Deck			
10.	Way			

D. VOWELS

Vowels are the letters a, e, i, o, u and sometimes y. Each of these short exercises will teach you something about vowels.

Exercise 1

WHAT TO DO: Say the following words to yourself. Write "long" or "short" after each word to show how the vowel sounds.

Examples:	b <u>i</u> lle	t short			
	b <u>o</u> at	long			
1.	l <u>i</u> ne		6.	hitch	
2.	bill		7.	p <u>i</u> pe	
3.	bunk	,	8.	log	
4.	n <u>o</u> te		9.	lamp	
5.	list		10.	rope	

Exercise 2

WHAT TO DO: The vowel in each of the following words is short. Make it a long vowel sound by adding a silent vowel to the word. Write the new word in the blank space.

- 1. pad (add silent i) _____ 5. mat (add silent e) _____ 2. rat (add silent e) _____ 6. stem (add silent a) _____
- 3. rip (add silent e) _____ 7. strip (add silent e) _____
- 4. per (add silent i) _____ 8. for (add silent e) _____

Exercise 3

WHAT TO DO: In each sentence below vowels (a, e, i, o, u, and y) have been left out. Fill in the spaces with correct vowels.

- Wh _ n John rep _ rts for d _ ty, he is oft _ n 1 _ te.
- 2. John's m tes think he is a p _ r w _ rker.
- 3. J_hn's d_visi_n ch_ef w_ll p_nish him.
- 4. 11 hands are n ded to d the sh p's work.
- 5. A g__d worker is lik_d by h_s m_tes.

Exercise 4

WHAT TO DO: Only ten of the following twenty words have long vowel sounds. Try to find them. When you do, write "long" in the blank space that follows each word and also the vowel that is long.

Exa	mples:	rate	long a	_			
		bunk		_			
1.	range			_	11.	stow	
2.	pass			-	12.	duty	
3.	rudder				13.	mast	
4.	boat				14.	winch	
5.	phase				15.	pilot	
6.	knot			_	16.	shift	
7.	1eave				17.	scope	
8.	pump				18.	bomb	
9.	nine				19.	stern	
10.	ramp				20.	strike	

Exercise 5

WHAT TO DO: When two vowels come together, usually the first is long and the second is silent. Draw a circle around the silent vowel in each of the following words.

Examples: ra 10 n; se 10

- 1. sailor
- 2. boat
- 3. peace
- 4. rescue
- 5. steam
- 6. fantail

- 7. inboard
- 8. issue
- 9. 1 e a v e
- 10. release
- 11. receive

Exercise 6

WHAT TO DO: Use the letters y, aw, al, au, oi, ou, oy, ow, to fill in the blanks.

- 1. He used pitch to c __ 1k the deck.
- 2. He caught the line on the third tr .
- 3. Seaman are ruled by the 1 __ of the sea.
- 4. He became sleep __ while on watch.
- 5. A measure of distance at sea is a n __ tical mile.
- 6. In the Navy, a t __ let is called a head.
- 7. A m _ sterious light appeared on the port side.
- 8. Flags are flown from the h _ yards.
- 9. The crew was given libert _ .
- 10. The line was coiled near the b __.
- 11. The 1 __ nch was tied up at the dock.
- 12. He returned to his quarters and took a sh __ er.
- 13. He has a cousin in the British R $_$ al Nav $_$.
- 14. The s __ nd of gunfire was heard in the distance.
- 15. The prisoner was charged with ass __ lt.
- 16. A g ro compass is used for navigation.
- 17. The heavy seas caused the ship to $y _$ to port.
- 18. The fleet was depl __ ed to the Pacific.
- 19. The guns made a lot of n __ se.
- 20. The installation was placed on standb _.

SECTION III

VOCABULARY

This section will help you learn Navy terms. Each of the exercises is based on the "Glossary of Frequently Used Naval Terms" at the end of the section. You will need to refer to this glossary in working through each of the exercises.

A. PARTS OF SHIPS GLOSSARY EXERCISE

Solving this puzzle will help you learn about parts of Navy ships. The clues below give a definition of each word. The first letter of each word is shown so you can use the "Glossary of Frequently Used Naval Terms" at the back of this section to help you.

1.	r
2.	<u>B</u> A _
3.	QR
4.	<u> </u>
5.	<u>s</u> s
6.	<u>н</u> о
7.	<u>A</u> F_
8.	s
9.	н
10.	<u> </u>
11.	P
	CLUES
5. 6. 7.	Left side of ship. Like a wall, but never called a wall. Area of main deck for official functions. Forward section of main deck (pronounced "foksul"). Part of ship above the main deck. Cargo stowage (or storage) area. Toward the stern (or rear) of ship. Right side of ship.
9.	Shell of ship.

10. After end (rear) of ship, main deck.11. Blades that turn to move a ship.

B. UNDERSTANDING NAVY TERMS

WHAT TO DO: The following statements contain an underlined word. Circle the letter which best describes what the word means. You will find these words defined in the "Glossary of Frequently Used Naval Terms" at the back of this section.

Example:

BILLET

There was an open billet in the division.

a. boat

position

b. hatch

d. mess hall

Explanation: A billet is an authorized position on a ship or shore station. Therefore, we circle letter $\underline{\mathbf{c}}$.

PART 1

HAZARDOUS

The sailor was assigned to hazardous duty.

a. dangerous

c. easy

b. overseas

d. dog watch

2. DECORATION

The sailor was given a decoration.

a. promotion

c. lecture

b. metal

d. medal

3. MUSTER

The chief was in charge of the muster.

a. meeting

c. engine room

b. mess hall

d. gangway

4. SPLICE

The sailor was told to splice the cable.

a. cut

c. join

b. throw

d. drop

5. SECURE

The crew was ordered to secure from fire drill.

a. report

c. run away

b. stop

d. repeat

6.	LAU	NCH

It was necessary to <u>launch</u> a lifeboat.

- a. paint
- c. repair
- b. put into the water d.
- take aboard

7. ARMAMENT

The ship's armament was in good working order.

- a. compass
- c. steering gear
- b. engines
- d. weapons

8. RANGE

The guns had a range of 5 miles.

- a. distance
- c. direction
- b. sound
- d. speed

9. BULKHEAD

Orders were posted on the bulkhead.

- a. bulletin board
- c. bridge

b. wall

d. hatch

10. CONN

The Captain gave the conn to the Executive Officer.

- a. control
- c. liberty

b. flag

d. compass

11. ENSIGN

The ensign was lowered.

a. flag

- c. boat
- b. officer
- d. line

12. BUOY

The buoy was seen on the starboard side.

- a. man overboard
- c. lighthouse
- b. marker
- d. island

1	3.	BL	OC1	KA	DE

One of the Navy's tasks is to blockade enemy ports.

- a. attack
- c. destroy
- b. visit
- d. isolate

14. NUCLEAR

The ship was driven by nuclear power.

- a. reduced
- c. diesel
- b. atomic
- d. wind

15. COMMENDATION

Because of his actions, the sailor received a commendation.

- a. discharge
- c. transfer
- b. praise
- d. promotion

16. HYDRAULIC

The hydraulic system was out of order.

- a. air pressure
- c. liquid pressure
- b. oxygen
- d. heating

17. INSIGNIA

He recognized the officer's insignia.

- a. uniform
- c. salute
- b. badges of rank
- d. face

18. INSTALLATION

This was his first visit to the installation.

- a. shore station
- . bridge

b. ship

d. wardroom

19. RESPIRATION

He was responsible for the <u>respiration</u> equipment.

a. radio

- c. salvage
- b. breathing
- d. rescue

PART 2

These underlined words are not in the Glossary of Navy Terms. Try to find them in your reading materials, if you do not know the answer.

1. VISUAL

The chief made a visual inspection of the equipment.

- a. confusing
- c. monthly
- b. by sight
- d. technical

2. PITCH

The heavy seas caused the bow to pitch.

a. sway

- c. rise and fall
- b, circle
- d. close

3. GALLEY

The galley was closed at 1400 hours.

- a. ship's store
- c. kitchen
- b. bridge
- d. gangway

4. EASE

The sailor was ordered to ease the line.

- a. break
- c. drop
- b. grease
- d. relax

5. HEADING

The ship was turned to a new heading.

- a. distance
- c. port
- b. direction
- d. destination

6. EMBARK

The sailors were given permission to embark.

- a. leave ship
- c. drop anchor
- b, go on board
- d. raise the flag

INTERCOM 7.

The cause of the trouble was found to be in the intercom.

- speaking a.
- c. d. compass
- passage b.
- engine

RADIATION 8.

The level of <u>radiation</u> was low.

rays

- c. distance
- radio b.
- d. noise

CAUTION 9.

Because of the danger, caution was advised.

- a. bravery
- c. care
- b. speed

delay

C. NAVY TERMS: SENTENCE COMPLETION

WHAT TO DO: The Navy uses many words that will be new to you. Sometimes the words mean the same thing as other words you know. Complete the following statements with the correct Navy word given below. You will find the definition to each of the answers in the "Glossary of Frequently Used Naval Terms" at the back of this section.

Example:

The	speed	of	a	ship	is	measured	in	nautical	miles	per	hour	or	KNOTS
-----	-------	----	---	------	----	----------	----	----------	-------	-----	------	----	-------

Answers to questions 1-5 (and example).

,,,,,,	ici s co que	.3010113 1-3 (and c	Admp (C)	•		
	•	stern	•	starboard		
	•	port	•	knots (answer to example)		
	•	overhead	•	bulkhead		
1.	The <u>left</u> side.	side of the ship	when fac	cing forward is called the		
2.	The <u>right</u>	t side of the ship	when fa	acing forward is called the		
3.	On board ship a wall is called a					
4.	On a ship a ceiling is called the					
5.	The rear	end of a ship is	the	•		
Ansı	vers to qu	uestions 6-10.				
	•	fantail	•	head		
		line	•	striker		
	•	screws				
6.	A toilet is known as the					
7.	Ship's propellers are called					
8.						
9.	The aft end of the weather deck is the					
10	A sailor who is learning a skill area on the job is called a					

WIIDM	iers to questions 11-15.					
	. gear	. watch				
	. muster	. wardroom				
	. davits					
11.	A sailor's clothing and equipment is called his					
12.	The officer's mess is called the					
13.	A period of special duty given to a sailor is called a					
14.	The devices from which the lifeboats hang are called the					
15.	5. To call a group together, or to take a roll, is known as a					
Answ	vers to questions 16-20 range . sonar . longitu	. semaphore . radar				
16.	J	p at sea is measured in latitude and				
17.	The distance from a ship to another ship or object is called the					
18.	The equipment used to locate another ship by radio waves on the surface, or in the air, is called					
19.	The equipment used to locate other ships by sound waves under water is called					
20.	A system in which a mais called	an moves signal flags to send messages to other	r ship			

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D. WORDS WHICH HAVE MORE THAN ONE MEANING

WHAT TO DO: You will find that many Navy words have two or more meanings. You must decide which meaning is correct by the way it is used.

Each of these words is defined in the "Glossary of Frequently Used Navy Terms" at the back of this section. Some of the meanings are included in the glossary definitions and some are not. Write "yes" in the space if it is included in the definitions and "no" if it is not. You may want to discuss the reasons for your choices with your instructor. As you work through this exercise, consider the glossary as a small dictionary. You will learn something about using a regular dictionary this way.

PART 1

1. PORT

- a. One meaning of "port" is "left." "The island appeared on the port (left) side of the ship."
- b. Another meaning of "port" is "a harbor." "The ship entered the <u>port</u> to refuel."
- c. Another "port" can be an "airport." "Alameda Naval Air Station (an airport) is a port of entry for returning sailors."

2. GEAR

- a. The word "gear" means a sailor's clothing and equipment. "The sailor stowed his gear in the locker."
- b. It also means a mechanical part of a car or other vehicle. "He put the car in high gear," or "the equipment had a stripped gear."

3. HOLD

- a. A "hold" is the large cargo storage space within a ship, below deck. "The cargo was lowered into the hold."
- b. "Hold" also means to stay where you are ("Hold your position!"); or to grasp something ("Hold this line!").

4. ENSIGN

This word has two very different meanings:

- a. An Ensign is a commissioned officer of the lowest rank, the same as a Marine Second Lieutenant. "The ensign reported to the captain."
- b. An <u>ensign</u> is also the flag of our country, the "Stars and Stripes." "The ensign was lowered at dusk."

5. LAUNCH

- a. A "launch" is a power boat, usually over 30 feet long, used for transporting personnel between a ship and the shore. "The liberty party was taken ashore by the launch."
- b. "To launch" means to propel or send a missile or torpedo. "The missile was launched against the enemy aircraft."
- c. "To launch" also means to float a new ship off the ways in a shipyard. "After a ceremony, the ship was launched."

6. HEAD

- a. A "head" means a compartment containing toilet facilities. "The head was closed for cleaning."
- b. "Head" also means "someone in charge." "He was the <u>head</u> of the department."

7. HITCH

- a. "Hitch" is a common term for an enlistment. "He signed up for another hitch."
- b. "Hitch" is also a rope tie or knot, around a ring, spar, or stanchion (a vertical metal post). "He fastened the line with a clove hitch."

8. INTELLIGENCE

- a. "Intelligence" means information, usually about the enemy and often classified as top secret, secret, or confidential. "Intelligence reports gave the enemy's position and strength."
- b. It also means a person's mental ability. "The sailor showed outstanding <u>intelligence</u>."

9. LIST

- a. "List" means to <u>lean</u>, usually relating to a ship. "The ship had a list to starboard."
- b. A "list" is also a number of things written on a paper. "He made up a laundry <u>list</u>."

10. LOG

- a. A ship's "log" is a written summary in a book, or ledger, of events as they occur. "An entry was made into the ship's log."
- b. A "log" is also a ship's speed indicator. "The <u>log</u> showed a speed of 20 knots."
- c. "To log" means to make a certain speed. "The ship <u>logged</u> 20 knots."

11. MAGAZINE

- a. On a ship, the "magazine" is the compartment or space where ammunition is stored. "No smoking is permitted in the magazine."
- b. A "magazine" is also the clip in a gun which holds the bullets.

 "He removed the magazine from the automatic pistol."
- c. A third "magazine" is the paperback publication containing stories and articles. "He bought a magazine at the ship's store."

12. MANUAL

- a. A "manual" is a book, or handbook, giving information and instructions. "He looked up the subject in the Bluejackets' Manual."
- b. "Manual" also means operation of something by the hands, or by nonautomatic means. "The truck had a manual transmission." "Chipping paint can be described as manual labor."

13. PIPE

- a. A "pipe" is the silver whistle used by the Boatswain's Mate for calls to get the crews attention to announcements or events. "The boatswain's pipe was heard over the ship's speaker."
- b. "To pipe" is the act of using the pipe as a call. "The captain was piped aboard."
- c. A <u>different</u> kind of "pipe" is used for smoking tobacco. "He lit his pipe."

PART 2

14. RANGE

- a. The "range" is the distance of an object from an observer or from the point. "The enemy ship was at a <u>range</u> of 15 miles."
- b. "Range" also means the greatest distance that can be travelled by a ship or aircraft without refueling, or a projectile before falling. "The aircraft has a range of 3,000 miles." "The guns have a range of 3 miles."
- c. A "range" is also the name of an area set aside for a particular purpose, such as a gunnery range, or a bombing range.

15. RATING

- a. A "rating" is the name for the particular type of work done by a Navy enlisted man. "He qualified for the machinist's mate <u>rating</u>."
- b. A "rating" is also an evaluation of a person's performance. "He received a high rating for his work on the project."

16. SHORE

- a. The "shore" is the land which meets a body of water. "The sailor was waiting on the shore for the launch."
- b. "To shore" means to use timbers in damage control to brace bulkheads and decks. "The damage control party attempted to shore the damaged bulkhead."
- c. A "shore" is the timber used in damage control. "The sailor placed a shore under the deck."

17. STRIKE

- a. A "strike" is an attack on enemy targets by aircraft. "The aircraft made a second strike against the enemy shore batteries."
- b. "To strike" means to learn or qualify for a new job or skill through on-the-job training or experience. "The sailor was allowed to strike for machinery repairman."
- c. To "strike" also means to haul down colors (flag). "The enemy was forced to strike his colors."

18. SWEEP

- a. "Sweep" means to clean with a broom. "All deck hands were ordered to sweep fore and aft."
- b. A "sweep" is the action of radar in scanning the area in a complete circle. "The sweep showed no targets in the area."

19. TRANSMISSION

- a. A "transmission" is a message or signal sent by radio. "The <u>transmission</u> was received at 1200 hours."
- b. A "transmission" is a device which applies engine power to move a vehicle. "He was told to repair the truck transmission."

20. WATCH

- a. A "watch" is one of the duty periods, normally 4 hours long, into which a ship's day is divided. "He was assigned to work the morning watch."
- b. A "watch" is also a special duty assignment, such as fire watch. "The seaman was assigned to fire watch."

21. WEIGH

- a. One meaning of "weigh" is to lift, as to lift an anchor from the sea bottom. "The order was given to weigh anchor."
- b. Another meaning of "weigh" is to determine the weight of an object.

 "He was told to weigh the cargo on the scales."

22. BATTERY

- a. A "battery" is a source of stored electric power. "He replaced the battery in the car."
- b. A "battery" is also a group of ship or shore guns of the same caliber or used for the same purpose. "The enemy aircraft were fired upon by the ship's antiaircraft battery."

23. BERTH

- a. A "berth" is space where a ship ties up. "The ship tied up at its berth at the dock."
- b. A "berth" is a sleeping place assigned to a man aboard ship. "He was assigned a berth in the forward compartment."
- c. A "berth" is also a margin, or distance, in passing something, as a wide berth. "The ammo carrier was given a wide berth."

24. KNOT

- a. A "knot" is a measure of speed of a ship or aircraft, equal to one nautical mile per hour. "The ship cruised at 25 knots."
- b. A "knot" is also a collective term for hitches and bends used to fasten lines. "He made a knot in the line."

25. SECURE

- a. To "secure" means to stop doing something. "The crew was told to secure from fire drill."
- b. "Secure" also means to make something fast. "Secure the forward hatch!"

26. PITCH

- a. To "pitch" means when the ship moves up and down from the bow in rough seas. "The ship <u>pitched</u> heavily in the storm."
- b. "Pitch" is the angle of the roof of a house. "The pitch of the roof was so low it was almost flat."
- c. "Pitch" is also a black tarry substance used to caulk the decks of a ship. "The sailor was busy applying pitch to the deck."

E. GLOSSARY OF FREQUENTLY USED NAVAL TERMS

AFT Toward the rear of a ship (stern or tail)

AGM Air-To-Ground Missile

AIRBORNE Something carried through the air, like troops or equipment;

or in flight

AIRCRAFT Any type of airplane

ALERT Prepared for action

ALLIES Countries that join together to fight against a common enemy

ALLOWANCE Extra money for meals, quarters, special or hazardous

duty; uniforms and other clothing given to you

AMMUNITION Bullets, shells, powder, missiles, rockets

AMPHIBIOUS A boat or vehicle that can operate on both sea and land

ANCHOR Has a hook and hords the ship in one place

ANTISUBMARINE Warfare against submarines (like locating, tracking, and

(Warfare)(ASW) destroying them)

APPRENTICESHIP The learning of a skill or rating on the job

ARMAMENT Weapons of a ship or aircraft

ASHORE "Go ashore" is leaving the base or ship on liberty

ASSAULT An attack; kind of ships or craft used to attack

AVIATION Related to aircraft and flying

AYE, AYE (Sir) The reply to an order; means "I understand and will

obey.'

BATTERY Ships' guns that are used as a group (because they are

the same size or are used for the same purpose)

BELLS, SHIP Bell sounded on ship to tell time; also can be a fire, fog,

or distress signal

BERTH Place where a ship is anchored; or where you sleep

BILGE(s) The lowest part of the inside of a ship; also the water

collected there

BILL A posted notice; list of duties or procedures (things

like fire bill or watch bill)

BILLET A specific assignment on a ship or station

BOAT A small vessel capable of being hoisted aboard a ship

BOATSMAIN Narrant officer; special duty officer in charge of anchors,

cables, hawers, rigging and sea gear

BOATSWAIN'S MATE Petty officer who is the boss of the deck crew

(Pronounced "bosun")

BOMB Explosive dropped from aircraft (but not a torpedo, guided

missile, or mine)

BULKHEAD Walls or partitions within a ship (never called a wall)

BUNK A bed

BUOY An anchored float to help in navigating or to show where

something is located under water

CADENCE Rhythm - as in marching

CAPTAIN'S MAST Meeting at which the Commanding Officer considers misdeeds;

punishes bad behavior

CARGO Materials carried in ships or aircraft; type of vessel

for carrying materials

CARRIER (Aircraft) A warship which carries aircraft; the planes fly from the

ship, complete their operation and then return (either

back to the ship or to land)

CHART A kind of map used at sea

CHIT An informal, signed promise to pay; request or authorization;

usually a slip of paper

CNO Chief of Naval Operations - The most senior member of the

Navy, who is a four-star admiral

COMBAT Military action in war

COMMENDATION Praise for a job well done, such as a medal, ribbon, or

letter

CONN Control of ships' movement; a place, usually on the bridge,

from which the ship is controlled

CONUS Stands for "Continental United States"; in other words.

all the states except Alaska and Hawaii

CORPS A military organization or unit (e.g., Marine Corps, Air

Corps) (pronounced "core")

COXSWAIN An enlisted man in charge of a boat (pronounced "cox-un")

CRUISER A large, high speed, lightly armored, combat ship

DAVITS Projecting steel arms or cranes used for lowering

and lifting lifeboats, torpedoes, and other objects

DECORATION A badge of honor; a medal or ribbon

DEEP SIX (Slang) To throw something overboard, get rid of it

DEPENDENT Child, wife, or relative who is supported by a person

in the military service

DEPLOYMENT When a ship leaves home port for a designated area for

extended periods of time (like a 7-month deployment

to the Mediterranean)

DESERTION Leaving a place of duty or organization without

permission, with the intent not to return

DESTROYER A high speed small warship designed to operate with

strike forces

DETACHMENT A temporary unit formed from other Naval forces

DETAIL A group of persons assigned to a particular duty; or

to assign people to such duty

DIESEL A kind of engine that usually burns oil

DITTY BAG (Slang) A small canvas bag used by sailors and marines

to stow odds and ends of gear

DIVISION The basic military unit of the Navy

DUTY Work assignment or status

ENGINE The machinery which supplies power to ships, aircraft,

cars, and so forth

ENGINEERING The section of a ship that contains the engines and

power equipment

ENSIGN The most junior commissioned officer; also the U.S.

flag

EVOLUTION Things which are done to perform a certain job

EXECUTIVE OFFICER (XO) The second-in-command of a ship, station, aircraft

squadron, or unit

FANTAIL The part of a ship's main deck which is farthest to

the rear (aft)

FEDERAL The U.S. Government

FISCAL Money, budget; financial

FLEET A large group of ships, aircraft, Marine forces,

and shore-based activities, all under a single commander;

or all operating Naval forces

FORE The front part of a ship

FORECASTLE The front part of the main deck, from the stern

to the anchor windlass (pronounced "fok-sul")

FRIGATE Medium-sized warship, similar to destroyer, but less

powerful

GANGWAY The entrance where you walk aboard ship; also means

"clear the way!"

GEAR Any kind of equipment, material, supplies or

baggage

GREENWICH MEAN TIME (GMT) A standard time system around the world

GRINDER (Slang) Paved area at a shore activity, for drill and

parades

GUARD A sentry

GUNNERY The science of using ordnance

GYRO A device used in instruments to help a ship or airplane

navigate; has a spinning wheel inside

HALYARD A light line used to raise a flag or pennant

HANGAR A large building to park and repair airplanes; also, the

deck area of a ship to do the same things

HARBOR A protected area of water where ships are anchored safely

HASHMARK Stripes worn on the sleeve, showing years of service in

the Navy

HATCH A square or rectangular opening in a deck giving access

to the deck or space below

HAZARDOUS Dangerous; something that could hurt you

HEAD Men's or women's toilet facility

HEADQUARTERS Place from which an organization is commanded; where

the commander has his office

HELO (Helicopter) A type of aircraft which uses rotating propeller blades

instead of fixed wings

HIGHLINE Lines between two ships at sea; used for moving supplies

from one ship to another

HITCH A term of enlistment, like 4 years; or a rope tie

HOLD Large storage place inside a ship

HULL The shell, or outside surface of a ship or seaplane (like

the body of a car)

HYDRAULIC A liquid pressure system for operating controls

INBOARD Toward the centerline of the ship or aircraft

INDICATOR A dial of an instrument that shows the operation of

equipment, navigational data, or position of controls

INSIGNIA Badges or other markings that show rank, position,

or branch of service

INSTALLATION A shore station

INTELLIGENCE Information useful for military operations, usually about

the enemy

INTERCEPT To cut off enemy forces, or to capture a radio message

sent from one enemy radio to another

ISSUE To give out clothing, rations, gear, and so forth, to

military personnel

JACKBOX A box with holes, into which telephone plugs or radio

jacks fit

JET An aircraft with jet engines. Jet engines have a

turbine that spins to give power, or thrust

JURISDICTION To have control over an area

JURY RIG Any makeshift device, rig, or piece of equipment used

for emergency or temporary repairs

KNOT(S)	A way to measure speed at sea or in the air; one knot is just a little over one mile an hour; or a knot in a rope; hitches and bends in a line
LASH	To tie up with a line (or wire). <u>Lagaing</u> is what you use to tie something down
LATITUDE	A term used to describe a ship's location north or south of the equator
LAUNCH	When something takes off from the deck of a ship, from an aircraft, or from the ground like a rocket; or to begin (an attack); or an open power boat
LAUNCHER	This is what is used to fire a rocket or guided missile
LAY AFT	"Go to the rear of the ship"
LCM	(Landing craft, mechanized) a craft used in the water and also on land. It is a boat with wheels
LCP	(Landing craft, personnel) an amphibious craft used for carrying people
LCU	(Landing craft, utility) an amphibious craft used for general purposes
LEAVE	Time allowed for vacation or being away from duty with permission for a period of time
LEEWARD	Direction away from the wind (pronounced "Loo-urd")
LIBERTY	Being allowed to go ashore when not on duty (a pass)
LIFEBOAT	Small boat on a ship, used for rescue or in case the ship goes down
LIGHTER	Barge-like vessel, used to load or unload ships
LINE	Rope (but not made of wire)
LIST	Leaning of a ship to one side or the other
LOCKER	A metal cabinet for storing gear, or any small compartment or cabinet
LOG	A ship's speedometer; or making a certain speed; or short for "logbook," which is a diary of what happens on a ship each day

LONGITUDE The term used to describe a ship's location east

or west from the Prime Meridian in navigation

LOOKOUT A man used to keep a visual watch from a ship who

reports things that he sees to the Officer of the

Deck

LORAN (Long Range Electronic Navigation) a kind of radio-aided

navigational system for ships and aircraft

MAGAZINE The place on ship or ashore used to store ammunition;

or a clip holding bullets for a pistol

MANEUVER A planned operation, or movement, of a ship or aircraft

MANUAL Hand-operated (non-automatic); or a book of instructions

MARINE Term meaning the sea, shipping or Naval activities,

or a member of the Marine Corps

MARK To write down a reading of time, quantity, or position

or a symbol used to identify a specific type or weapon

or equipment (like MARK VI)

MAST A tall pole on ship, with spars, used to hang lines,

and mount equipment

MATE Assistant to a skilled person, or fellow worker (slang)

MED Abbreviation for "Mediterranean Sea"

MERCHANT VESSEL Non-military cargo ship

MERITORIOUS Deserving praise

MIDWATCH The watch which begins at 0000 (midnight) and ends at

0400 (4:00 a.m.)

MILITARY Term meaning the armed forces of a country

MINE Explosive device placed in the water to blow up enemy

ships; also used on land

MISSILE A weapon which is shot through the air by burning fuel

MISSION What a group or organization is supposed to do

MOOR To tie a ship to a pier (a mooring)

MORALE A person's or group's general attitude about working

and living conditions

MOUNT A platform for a heavy gun

MUSTER A roll-call, or an assembled group

NAUTICAL (Mile) A distance slightly more than a mile (6,080 feet) which

is a measure of distance at sea

NAVY ENLISTED CODE A nu

(NEC)

A number system to identify the various Navy enlisted

skill areas

NBC (Nuclear-Biological-Chemical) Types of weapons, or

defensive measures using these weapons

NOISE Signals heard when SONAR is used

NON-COMMISSIONED N

(Officers)

Navy Petty Officers or Marine Sergeants

NOZZLE A spout at the end of a hose or pipe which controls

what comes out

NUCLEAR Atomic power for weapons or reactors

OFFICIAL Something which is formal, or authorized

ORDNANCE Weapons, ammunition, combat vehicles, and maintenance

tools and equipment used by military forces

OUTBOARD Outside of, or away from, the centerline of a ship or boat:

OVERHEAD The ceiling of a compartment on a ship (but never called

a ceiling)

OVERSEAS Outside of the U.S.

OXYGEN The part of air which you must breathe to live

PACIFIC (Ocean) The largest and deepest of the world's oceans

PAD A platform on the deck of a ship for helicopters to

take off and land

PARACHUTE A pack which opens like an umbrella, which allows you

to jump from an airplane and land safely

PARALLEL Lined up side by side; or a line of latitude (navigation)

PASS To qualify for advancement by examination; or a written

permission to leave your duty or place (a liberty

chit)

PATROL A group of men looking for the enemy near the enemy

lines, or ships doing the same thing

PAYGRADE Military rank or rate

PCS (Permanent Change of Station) a transfer to a new duty

assignment

PEACETIME Not during wartime

PENNANT(S) Long, narrow flags that are flown to tell about what

is happening on the ship (like an admiral is aboard)

PHASE Type of electrical circuit (like 2-phase, 3-phase);

or a part of some activity, such as training

PIER Structure that extends from land into the water where

ships tie up

PILOT A person who steers a ship in or out of a port; or

someone who flies an aircraft

PILOTAGE Navigating a ship near land; or in an aircraft, navigation

by looking at landmarks on the ground

PILOTING Flying an aircraft or guiding a ship

PIPE A whistle that the boatswain uses to make calls on a

ship

PITCH Ship's bow up and down motion caused by the waves; or a

tar-like substance used to caulk decks

PLANE An aircraft (airplane)

PLOT A map of the course of a ship, aircraft, or

submarine; or the technical and operational control

center aboard ship

PMS (Planned Maintenance System) A Navy system designed to

manage, schedule, and control maintenance

PORT Left; or a city that ships come into; or short for

"airport"

PROPELLER Metal or wooden blades used to propel a ship or aircraft

PROPULSION Propelling a ship, aircraft, or object

PROVISION To supply a ship with food and stores

PULSE (Rate or Length) a beat that occurs regularly

PUMP A machine that moves fluids or gases usually through

pipes

QUARTER The area dead astern of a ship, on either beam (side)

QUARTERDECK A place on main deck of a ship, used for ceremonies

QUARTERMASTER (QM) A petty officer of the bridge force and signal gang,

who assists the navigator or OOD

QUARTERS Living spaces, or areas on a ship for special

duties, such as general quarters

RADAR (Radio Detection and Ranging) uses radio waves to

detect objects and tell their location

RADIATION Invisible rays from atomic materials that can hurt

you; a shield needs to be put around atomic materials

for protection from radiation

RAMP A paved area where aircraft are parked, or place where

you unload cargo or a ship

RANGE Distance; or an area for target shooting or bombing

RANK Grade of officers in the military service, or a line of

people side by side in a formation

RATE Enlisted paygrade, or the skill level of a rating

RATING Group of enlisted personnel with the same military

skill (like machinists' mate)

RATIONS Food issued for different purposes, such as when flying,

special duty, or in emergencies

REACTOR (Nuclear) A source of power using atomic energy

REPLENISHMENT The process of supplying food, fuel, stores, ammunition,

and personnel to ships

RESCUE Saving lives

RESPIRATION Breathing

REVEILLE Wake-up bugle call

REVERSE Opposite, or to move backward

RIG To set up equipment

ROCKET A missile driven by burning gases coming out the back

ROPE Term meaning both fiber and wire lines

RUDDER Device at the stern of a ship or aircraft, used for

steering

SABOTAGE Damaging equipment on purpose

SAILOR Person in the Navy, or anyone who works on a ship

SALUTE Military greeting between officers and enlisted

personnel, or firing guns or lowering flags to greet

a person for special occasions

SALVAGE To save material that has been damaged

Short for "periscope"; a cathode ray tube (CRT) indicator; or "telescope" **SCOPE**

SCREWS Ship's propellers

SEAL (Sea Air, Land Teams) A Navy combat unit with

specially trained personnel, or one who is a member of

this kind of unit

SEAMAN Sailor, or rating of a Navy person

SEAMANSHIP Navigating and sailing a ship (requires using deck

equipment, boat handling, and the care and use of

line and wire)

SECNAV Short for the "Secretary of the Navy"

SECTION A subdivision of a Navy Division

SECTOR An area in which a search is conducted

SECURE To make fast (tie-up), or to stop doing something

SEMAPHORE A rapid way to signal between ships by moving signal

flags by hand

SENTRY A guard

SHAFT Propeller or engine shaft

SHELL The skin (hull) of a ship

SHIFT Wind changing direction, or moving a rudder to opposite

position, or a work/duty period

SHIP Any large seagoing vessel that can travel long distances

in the sea; or to take on water in rough seas

SHIPBOARD On a ship

SHIPMATE Person you serve with at sea

SHIP OVER To reenlist in the Navy

SHIPSHAPE Neat, clean, in fine shape

SHIP'S COMPANY People who make up the crew of a ship - permanent

personnel assigned

SHORE Brace up (damage control); or the land next to water

SHOTLINE The first line to pass from ship to ship or from ship

to shore. It is a small line shot from a special gun

and used to haul over larger lines

SHOTS Immunizations (slang)

SIGHT To see for the first time, or when checking the position

of a star in navigating

SIGNAL A short message sent out, or flags used for signaling,

or a machine like a telegraph

SIGNALING Sending a message (signal)

SIGNALMAN The Navy rating for duty in sending and receiving signals

SLING Gear for hoisting something aboard (like boat

slings)

SONAR (Sound Navigation And Ranging) Underwater sound

equipment for submarine detection or navigation which

uses sound waves through water

SOUND To determine the depth of water; or a water area between

the mainland and an island near it

SPACE Areas of a ship with a particular use, such as work

space or living space

SPAR Piece of wood attached across the mast, used as a boom or

to hang signal halyards

SPLICE To join lines or wires together

SQUADRON Two or more divisions of ships or aircraft

STACK Chimney on a ship ("smoke-stack")

STANDBY To prepare for something; waiting for orders

STARBOARD The right side of a ship when facing forward

STATION A place of duty; or the position of a ship in a formation

STATUS The condition of something; or position or rank as

compared to others

STEADY An order for a ship to hold its present course

STEAM The vapor from boiling water; used under pressure to

power some ships; or the movement of a steam-powered ship

STEER To control a ships' direction and course by moving the rudder

STEM The sharp leading edge of the ship's bow

STERN The rear end of a ship

STORES Supplies of all kinds

STOW To store or pack articles or cargo in a space

STRATEGIC Related to strategy (plans) about how to achieve

national aims

STRIKE An attack by aircraft against ground or ship targets;

or to haul down (colors or flags)

STRIKER An apprentice or learner

STRIPES Cloth badges of paygrade, rate, rank, or length of

service

SUBMARINE A warship which travels under water

SUBMERGED Under water

SUPERSTRUCTURE Part of the ship and rigging above the main deck

(but not the top hamper, masts, spars, antenna)

SURFACE To rise to the surface of the water

SURRENDER To yield or give up

SURVEILLANCE	Observation; keeping watch over something or someone
SWAB	Мор
SWEEP	Fighter aircraft mission to control the skies; to clear mines; radar antenna turning around; or to clean with broom
TAD	Stands for "Temporary Additional Duty." A short period of duty away from your regular place of duty; a special assignment
TALKER	Telephone communicator-someone who passes information or orders over a voice-actuated phone
TAPS	Bugle call to let you know it's time to turn in; also played at funeral or memorial services
TEDUIN	Stands for "Temporary Duty for Instruction." Means attending school or training under temporary duty orders
TENDER	A person who is a back-up for someone else; or a support ship which supplies services to other ships
TIDE	The rising and falling of the ocean level (caused by the gravitational force of the moon and sun)
TOLERANCE	Amount of error that is acceptable; or consideration for others faults
TOPIC	The subject of a lesson or discussion
TOPSIDE	Weather deck (the deck of a ship which is open to the sky)
TORPEDO	A long metal cylinder packed with explosives, which is launched through the water against enemy ships
TOURNIQUET	A binding used to stop bleeding of wounds in arms or legs; cuts off the flow of blood
TRANSMISSION	The sending of a message or signal; or a transmitted message or signal
TRANSMITTER	Device for sending radio or radar messages or signals
TRANSPORT	A ship or aircraft designed to carry personnel and/or cargo
TRIGGER	To set off or to start something; or the thing that does this; also, part of a pistol or rifle

TROOPS A group of enlisted military personnel (usually Army);

Navy enlisted personnel as a group (slang)

TUG Small, handy boat of high power, used for towing

ships in and out of port or other tight places

TURBINE Multibladed rotating shaft driven by steam or hot air,

which drives a propeller or produces electric power

UCMJ Stands for "Uniform Code of Military Justice." Basic

laws for the armed forces

UNCOVER Take off hat or cap

UNDERWAY Refers to a ship that is moving

UNREP (Underway Replenishment) To take on stores from another

ship while at sea

VESSEL A ship

VERTREP (Vertical replenishment) - similar to UNREP except stores

are moved from ship to ship by helos

VETERAN Person who has served in the armed forces

VIOLATION The act of breaking a rule, law, or policy

WARDROOM Place where officers eat and relax when off duty

WARRANT (Officer) Special rank of officer; upper grades are "commissioned

warrant"

WARSHIP Any kind of ship used in combat

WARTIME Not peacetime

WATCH Duty period; normally 4 hours long

WATERLINE Where the hull of the ship meets the water

WEAPON Any device which can be used against an enemy

WEIGH (Anchor) To lift the anchor off the bottom in getting underway

WELL Hole, compartment, or open space

WHEEL To change course; or the helm of a ship

WINCH A machine for letting out or taking up lines on a ship

WINDWARD

Direction; toward the wind

WINDLASS

A machine used for handling an anchor chain

APPENDIX A EXERCISES TO BE DONE IN A GROUP LED BY INSTRUCTOR

NAVY WORDS WITH UNUSUAL PRONUNCIATION

WHAT TO DO: Pronounce these words out loud and discuss their meaning and pronunciation with your instructor.

1. CORPS

"Corps," pronounced "core," is a word meaning an organized subdivision of the military establishment; e.g., Marine Corps. It can also mean a tactical unit, usually consisting of two or more divisions and auxiliary arms and services (Army).

BOATSWAIN

"Boatswain," pronounced "bo-sun," is the Navy's name for a warrant officer whose major duties are related to deck and boat seamanship.

3. FORECASTLE

"Forecastle," pronounced "fok-sul," is the name for the forward section of the main, or weather, deck of a ship.

4. GREENWICH

"Greenwich," pronounced "gren-itch" is the location, near London, England, where the prime meridian of longitude is located, and where standard time (Greenwich Mean Time) originates.

5. LEEWARD

"Leeward," pronounced "loo-ard," means the direction toward which the wind is blowing.

COXSWAIN

"Coxswain," pronounced "cox-un," is the Navy title for an enlisted man who is in charge of a boat.

7. GUNWALE

"Gunwale," pronounced "gun-ul," is the upper edges of the sides of a ship.

8. QUAY

"Quay," pronounced "key," is a solid structure along a bank used for loading and unloading vessels (dock, pier, wharf).

9. ENSIGN

"Ensign," pronounced "en-sin" is the lowest rank of commissioned officers; also the national flag.

10. TACKLE

"Tackle" as in "ground tackle," pronounced "take-ul," is the general term for all anchoring equipment aboard a ship, or an arrangement of lines and blocks.

11. LEAD

"Lead," pronounced "led," is a weighted device used for measuring the depth of water.

12. YEOMAN

"Yeoman," pronounced "yo-man," is a Navy administrative rating.

ANALOGIES

WHAT TO DO: From the list above the statements, write the word which should go in each of the blank spaces. In each statement, the first two words are related to each other in the same way as the last two words.

Examples:

1. Bow is to stern as port is to starboard.

In this example, "bow" and "stern" are opposites. In the same way, "port" (left) is the opposite of "starboard" (right).

2. A parachute is to an aircraft as a <u>lifeboat</u> is to a ship.

In this example, a parachute is a lifesaving device for an aircraft, just as a <u>lifeboat</u> is a lifesaving device on a ship.

3. "Break Out" is to remove as stow is to "put away."

In this example, "break out" means to remove, or take out something, and "stow" means to "put away."

	STORES	ANCHOR	FANTAIL				
	BEARING	HEAD	OUTBOARD				
	SONAR	LIBERTY	LONGITUDE				
	LAY FORWARD	OVERHEAD	DEBARK				
	STARBOARD	CHART	SCUTTLEBUTT				
1.	Radar is to air as	is to wate	er.				
2.	Wall is to bulkhead as ceiling is to						
3.	Passage is to hall as toilet is to						
4.	Port is to left as	is to righ	nt.				
5.	Distance is to range a	s direction is to	·				
6.	Ladder is to stairs as	<u> </u>	is to rumors.				
7.	Watch is to duty as	is	to leave.				
8.	Forecastle is to forwa	rd as	is to aft.				

9.	Rations is to food as is to supplies.
10.	A mooring is to a dock as an is to sea.
11.	Inboard is to inside as is to outside.
12.	"Go aboard" is to embark as "go ashore" is to
13.	"Go to the rear" is to "lay aft" as "go to the front" is to
14.	Parallel is to latitude as meridian is to
15.	Map is to land as is to sea.

WORDS THAT HAVE THINGS IN COMMON

WHAT TO DO: This exercise consists of groups of four words. Three of the words in each group have something in common; the fourth is different in some way. Circle the word that is different. There may be more than one correct choice. When you finish, your instructor will talk with you about why you picked a particular answer, so be prepared to give your reasons.

Examples:

1. Builder
Boiler Technician
Steelmaker
Equipment Operator

In this case, Builder (BU), Steelworker (SW), and Equipment Operator (EO) are ratings in the construction group. Boiler Technician (BT) is in the Engineering and Hull rating group. You should circle "Boiler Technician."

2. Aft
Stern
Fantail
Bow

In this case, aft, stern, and fantail refer to, or are located at, the rear of the ship. The bow is at the forward, or front, so it should be circled.

Exercise 1

- 1. Mess Management Specialist Storekeeper Cook Galley
- 3. Recruit Trainee Novice Veteran
- 5. Admiral
 Ensign
 Major
 Lieutenant Commander
- 7. Quartermaster
 Boatswain's Mate
 Gunner's Mate
 Signalman
- 9. Illustrator-Draftsman Journalist Musician Lithographer

- 2. Green Stripes
 Fireman
 Airman Apprentice
 Airman
- 4. Marlinspike Knot Tying Line S⊇maphore
- 6. Captain's Mast Article 15 Non-Judicial Punishment Court-Martial
- 8. Mess Head Galley Wardroom
- 10. Leave
 Restriction
 Liberty
 Pass

Exercise 2

- 1. Bow Stern Forward Stem
- 3. Port
 Starboard
 Range
 Bearing
- 5. List Cruise Pitch Yaw
- 7. Periscope Ailerons Bridge Rudder
- 9. Rating Specialty Rank Skill
- 11. Trigger Scabbard Clip Barrel

- 2. Dock Anchorage Quay Pier
- 4. Flag Stanchion Pennant Ensign
- 6. Destroyer Tender Cruiser Frigate
- 8. Record Log Journal Clock
- 10. Berth Locker Bunk Hammock

Exercise 3

- 1. Tourniquet
 Armament
 Splint
 Sling
- 3. Engineroom Turbine Pump Binnacle
- 5. Ordnance Provisions Ammunition Armament
- 7. Fleet
 Squadron
 Division
 Sector
- 9. Maneuver Turn Movement Hydraulic
- 11. Warrant Seaman Commissioned Petty

- 2. Secure Bridge Fasten Safe
- 4. Bearing
 Direction
 Degrees
 Distance
- 6. Time
 Bells
 Clock
 Altimeter
- 8. Inspection Cadence Drill Marching
- 10. Sonar Air Water Sound
- 12. Radar Water Air Scope

LEARNING "ORDERS TO THE SENTRIES"

Navy recruits must learn the orders that deal with sentry duties and recall each by number. This training supplement contains a memory aid called the peg word method which will make it easy to learn and recall the essential point of each of the orders by number.

First, spend a few minutes learning the peg words. They are easy to learn because they rhyme with the numbers one to ten.

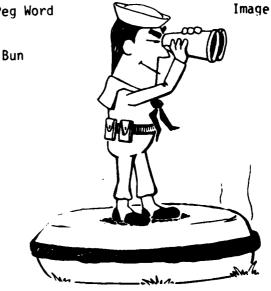
> One - Bun Two - Shoe Three - Tree Four - Door Five - Hive Six - Sticks Seven - Heaven Eight - Gate Nine - Line Ten - Men

Use the peg words to help learn the orders to the sentries. Picture in your mind, by looking at the illustrations, the peg word together with the essential point of the order to be learned. As you recall a particular order remember the same image.

Order

1. Take charge of this post and all government property in view.

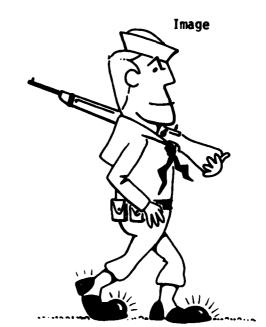
Peg Word



Sentry on a giant bun overlooking post, "taking charge" of post.

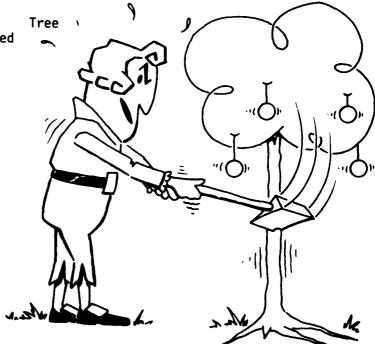
Shoe

2. Walk my post in a military manner, keeping always on the alert, and observing everything that takes place within sight or hearing.



Walking post wearing well shined shoes in military manner.

3. Report all violations of orders I am instructed to enforce.

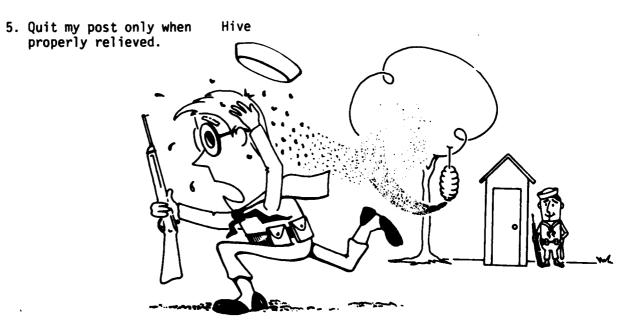


George Washington chopping down cherry tree and then reporting "violation" to his father.

 Repeat all calls from posts more distant from the (guard house) quarterdeck than my own.

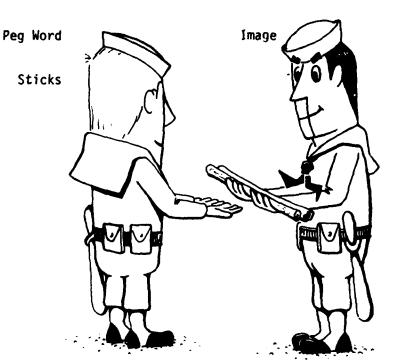


Sentry repeating call from guard house with door open.



New sentry relieving old sentry who is being chased by bees from hive.

6. Receive, obey and pass on to the sentry who relieves me, all orders from the commanding officer, command duty officer, officer of the day, officers of the deck, and officers and petty officers of the watch only.



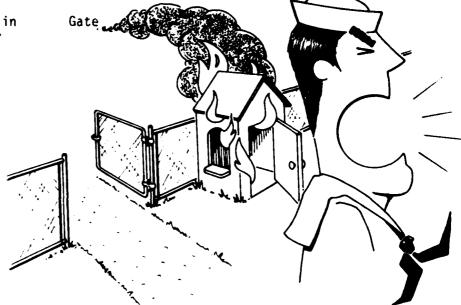
New sentry being given orders (on scrolls that look like sticks) from sentry relieving him.

7. Talk to no one except in line of duty.



Silent angel/sentry.

8. Give the alarm in case of fire or disorder.



Sentry giving alarm with open gate behind him.

 Call the (corporal of the guard) officer of the deck in any case not covered by instructions.

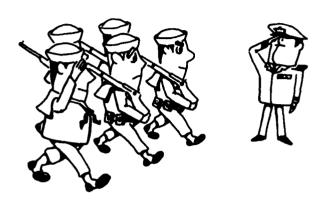
Line



Sentry calling officer of the deck.

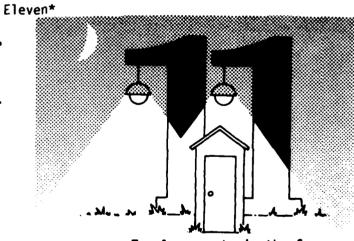
10. Salute all officers and all colors and standards not cased.

Men



Men saluting officer.

11. Be especially watchful at night, and, during the time for challenging, challenge all persons on or near my post, and allow no one to pass without proper authority.



Two lamp posts in the form of an eleven light up the sentry post at night.

*While there is no peg word for eleven, the number itself serves as the memory aid in this case.

HOW TO SAVE SOMEONE FROM CHOKING TO DEATH: THE HEIMLICH MANEUVER*

Wouldn't you like to feel that you can save the life of your wife, husband, a child, a shipmate, or a friend? This tells you how it can be done in one instance; in the case of a rather common cause of accidental death - choking to death from windpipe blockage. It is based on my own experience.

I was recently with a small group at a hurried business luncheon. Suddenly, one of our group was a few moments away from death. He could not breathe, and could not cry out for help, but his bulging eyes showed his terror. His normally ruddy face was slowly changing to blue. One ounce of medium rare roast beef, firmly lodged in his wind pipe, was about to kill him.

What would have been a senseless tragedy turned out to be merely an uncomfortable incident. In fact, a few minutes later, although shaken, the victim was able to resume the business discussion at hand.

What saved him was a simple procedure; a method of forcing foreign objects from the windpipe - the Heimlich Maneuver. Dr. Henry J. Heimlich, a physician specializing in throat surgery, and the inventor of the technique, has been encouraging the use of the simple procedure he invented. I learned it just through watching him give a demonstration on a morning television show.

As I turned to the victim, and saw his distress, the TV demonstration came to mind.

"Are you choking?" I asked. He nodded frantically. Later he told me he hadn't drawn a breath in at least 30 seconds, and had forced the object deeper down his windpipe in his efforts to get air into his lungs. Quickly I slid my chair behind his, and placed my arms around his body from behind, with my right hand, curled in a fist, positioned slightly above his navel. Next I applied hard upward pressure with both hands, my left hand pressing on my right fist. This procedure compresses the lungs, forcing air against the lodged object to pop it out. Nothing happened. Then, the second press forced out a bit of meat and saliva, but his throat was still blocked. At least a minute had passed since any air had entered his lungs, and he was nearly unconscious. But now he could feel the deadly object coming up, and thrust his hand down his throat, grasping desperately for the meat. Thirty seconds later, and after about six more even harder presses, we heard a rasping rush of air being sucked through the air passage. Finally freed, my friend breathed for the first time in nearly two minutes. The relief was electric! A glob of partly chewed meat and saliva about the size of a walnut lay on the plate. He recovered slowly during the next few minutes, and now was embarrassed.

"I'm sorry I ruined your lunch, guys," he apologized. We were all still in a state of shock. "A corpse would have upset us more," one of us joked, and the tension faded.

^{*}This is a true story that happened to one of the authors of this workbook, J. Peter Kincaid.

The Heimlich Maneuver requires no equipment, is very effective and is easily learned. A few minute's practice on your part could save someone's life. Why not take the time to learn it right now? Keep in mind that many sudden deaths, thought to be heart attacks, were actually due to choking on food.

This is the procedure:

If the Choking Person is Standing or Sitting:

Get behind him with both hands around his waist. Make a fist with one hand with the thumb toward his stomach. Put the fist just above his navel, and cover it with your other hand. Press upward hard and fast. Repeat this action until the object is forced out (see illustration).

If the Choking Person is Lying Down:

Turn him face up and kneel over his hips. Place the heel of one hand above the navel, with your other hand covering it. Press hard and quickly upward until the object is expelled.

If You Yourself are Choking:

Do anything that will force your diaphram upward. Press with your own fist, or press into the corner of a table or sink.



This is the position for administering the Heimlich Maneuver when the victim is standing. Note that the clenched hand is pressed with the other hand upward slightly under the victim's ribs.

APPENDIX B
INSTRUCTOR SUPPLEMENT

CALCULATING READING RATE FOR COMPREHENSION PASSAGES

To the instructor: This chart will help you calculate the reading rate of your students reading the passages in Section I (Comprehension Exercises). They should be able to answer the questions that follow the narrative passages or they have read too fast.

		Time	to Fin	ish the	Passa	age (ir	n minut	tes)	
	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	10.0
Your Pay and Allowances (296 words, RGL* = 4.5)	296	196	148	118	98	84	74	59	30
Equal Opportunity and Treatment (341 words, RGL = 5.5)	341	327	171	136	114	97	85	68	34
Learning the Navy Language (526 words, RGL = 4.0)	526	351	263	210	175	150	132	105	53
Personal Conduct (679 words, RGL = 4.0)	679	453	340	272	226	194	170	136	68
Military Time (406 words, RGL = 6.5)	406	271	203	162	135	116	102	81	41
Recognizing Officers (831 words, RGL = 6.5)	831	554	416	332	277	237	208	166	83
Recognizing Chief Petty Officers and Other Enlisted Personnel (550 words, RGL = 8.5)	550	367	275	220	183	157	138	110	55
Navy History and Tradition (1,306 words, RGL = 5.0)	1,306	271	653	522	435	373	327	261	131
Military Justice** (1,106 words, RGL = 10.5)	1,106	737	553	442	369	316	27?	22 7	112

^{*} RGL is "Readability Grade Level" according to the Flesch-Kincaid Readability Formula, the current Department of Defense readability standard.

RGL = $12 \times (syllables per word) + .4 \times (words per sentence) - 16.$

^{**}RGL of this exercise is higher than the others so a lower reading rate might be expected.

ANSWERS TO EXERCISES

SECTION I - COMPREHENSION

Following Directions. (Fire Watch) 1-c, 2-b, 3-a, 4-b, 5-a, 6-b, 7-c, 8-a. (How to Scan) 1-a, 2-c, 3-b, 4-b, 5-a. (Using Sound-Powered Telephones) 1-c, 2-b, 3-b, 4-c. (Using Paint and Varnish Removers) 1-b, 2-c, 3-b, 4-a, 5-c.

Your Pay and Allowances. 1-c, 2-b, 3-c, 4-d, 5-c.

Equal Opportunity and Treatment. 1-c, 2-a, 3-c, 4-d, 5-d.

Learning the Navy Language. 1 - port, 2 - starboard, 3 - bulkhead, 4 - overhead, 5 - stern, 6 - bow, 7 - ladder, 8 - head, 9 - screw, 10 - line, 11 - passage, 12 - fantail, 13 - striker, 14 - gear, 15 - wardroom, 16 - watch, 17 - davits, 18 - muster, 19 - knots, 20 - latitude, longitude, 21 - range, 22 - radar, 23 - sonar, 24 - semaphore.

Personal Conduct. 1-b, 2-d, 3-a, 4-d, 5-b.

Military Time (Exercise 1)

Civilian	<u>Military</u>	Military	Civilian
5:30 a.m.	0530	0932	9:32 a.m.
12 noon	1200	1410	2:10 p.m.
2 p.m.	1400	2315	11:15 p.m.
4:15 p.m.	1615	1028	10:28 a.m.
7:02 a.m.	0702	2400	12 p.m. (midnight)
8:45 p.m.	20 4 5	0005	12:05 a.m.
2:58 a.m.	0258	2359	11:59 p.m.
2:58 p.m	1458	1200	12 a.m. (noon)
12 midnight	2400	1318	1:18 p.m.
12:15 a.m.	0015	0802	8:02 a.m.
12:40 p.m.	1240	1732	5:32 p.m.
4:00 a.m.	0400	0224	2:24 a.m.
5 o'clock	0500 or 1700	1259	12:59 p.m.
12 o'clock	1200 or 2400	2113	9:13 p.m.

(Exercise 2) 1-2 p.m., 2-2400, 3-1630, 4-1 minute past noon.

Recognizing Officers. 1-b, 2-c, 3-b, 4-c, 5-b, 6-c, 7-b, 8-a, 9-c, 10-d.

Recognizing CPOs and Other Enlisted Personnel. 1-b, 2-b, 3-d, 4-a, 5-b, 6-b, 7-c, 8-b, 9-c.

Naval History and Tradition. 1-b, 2-a, 3-d, 4-a, 5-c, 6-a, 7-a, 8-c, 9-b, 10-a, 11-a, 12-c, 13-a, 14-c, 15-b, 16-d, 17-c.

Military Justice. 1-a, 2-b, 3-d, 4-b, 5-d, 6-a, 7-b, 8-d, 9-b, 10-c, 11-d, 12-b, 13-a, 14-b, 15-d.

SECTION II - WORD ANALYSIS SKILLS

- Consonants Puzzle. Down: 1 bases, 2 moral, 4 CONUS, 5 - valor, 7 - radar, 8 - metal, 10 - power, 11 - gyros. Across: 3 - sonar, 6 - naval, 9 - davit, 12 - water.
- Consonant Blends. 1-b, 2-c, 3-a, 4-b, 5-b, 6-c, 7-b, 8-a, 9-b, 10-c, 11-a, 12-b, 13-a, 14-b, 15-c.
- Compound Words. (Exercise 1) 1 ward, 2 quarter, 3 amid, 4 - star, 5 - bulk, 6 - fan, 7 - over, 8 - top, 9 - fore
 10 - lifeboat, 11 - lookout, 12 - battleship, 13 - overseas,
 14 - gangway, 15 - helmsman, 16- signalman, 17 - shipmate.

(Exercise 2 - Possible answers)

- Head: headquarters, bulkhead, overhead
- Board: overboard, starboard, freeboard, inboard, outboard
- A: astern, abeam, aloft, adrift, afire, afloat, 3. atop
- Air: airplane, airborne, aircraft
- Be: below, belay 5.
- 6.
- Fore: forecastle, foremast Side: topside, outside, broadside, inside 7.
- Man: helmsman, signalman, fireman
- Deck: quarterdeck 9.
- Way: gangway, passageway, companionway
- Vowels (Exercise 1) 1 long, 2 short, 3 short, 4 long, 5 short, 6 - short, 7 - long, 8 - short, 9 - short, 10 - long.
 - (Exercise 2) 1 paid, 2 rate, 3 ripe, 4 pier, 5 mate, 6 steam, 7 stripe, 8 fore.
 - (Exercise 3) 1 When John reports for duty, he is often late.
 - 2 John's mates think he is a poor worker.
 - 3 John's division chief will punish him.
 - 4 ATI hands are needed to do the ship's work.
 - 5 A good worker is liked by his mates.
 - (Exercise 4) 1 range has long a, 4 boat has long o, 5 - phase has long a, 7 - leave has long e, 9 - nine has long i, 11 - stow has long o, 12 - duty has long u, 15 pilot has long i, 17 - scope has long o, 20 - strike has long i.
 - (Exercise 5 silent vowel is circled) 1 sallor, 2 bolt, 3 - peace, 4 - rescue, 5 - steam, 6 - fanta 1. 7 - inboard, 8 - issue, 9 - leave, 10 - release, 11 - receive.

```
(Exercise 6) 1 - caulk, 2 - try, 3 - law, 4 - sleepy, 5 - nautical, 6 - toilet, 7 - mysterious, 8 - halyards, 9 - liberty, 10 - bow, 11 - launch, 12 - shower, 13 - Royal Navy, 14 - sound, 15 - assault, 16 - gyro, 17 - yaw, 18 - deployed, 19 - noise, 20 - standby.
```

SECTION III - VOCABULARY

"Parts of Ship" Glossary Exercise. 1 - port, 2 - bulkhead, 3 - quarterdeck, 4 - forecastle, 5 - superstructure, 6 - hold, 7 - aft, 8 - starboard, 9 - hull, 10 - fantail, 11 - propeller.

Understanding Navy Terms (Part 1). 1-a, 2-d, 3-a, 4-c, 5-b, 6-b, 7-d, 8-a, 9-b, 10-a, 11-a, 12-b, 13-d, 14-b, 15-b, 16-c, 17-b, 18-a, 19-b. (Part 2) 1-b, 2-c, 3-c, 4-d, 5-b, 6-b, 7-a, 8-a, 9-c.

Navy Terms: Sentence Completion. 1 - port, 2 - starboard, 3 - bulkhead, 4 - overhead, 5 - stern, 6 - head, 7 - screws, 8 - line, 9 - fantail, 10 - striker, 11 - gear, 12 - wardroom, 13 - watch, 14 - davits, 15 - muster, 16 - longitude, 17 - range, 18 - radar, 19 - sonar, 20 - semaphore.

Words Which Have More Than One Meaning (Part 1). 1a - yes, 1b - yes, 1c - yes, 2a - no, 2b - no, 3a - yes, 3b - no, 4a - yes, 4b - yes, 5a - yes, 5b - yes, 5c - no, 6a - yes, 6b - no, 7a - yes, 7b - yes, 8a - yes, 8b - no, 9a - yes, 9b - no, 10a - yes, 10b - yes, 10c - yes, 11a - yes, 11b - yes, 11c - no, 12a - yes, 12b - yes, 13a - yes, 13b - no, 13c - no, 14a - yes, 14b - no, 14c - yes, 15a - yes, 15b - no, 16a - yes, 16b - yes, 16c - no, 17a - yes, 17b - no, 17c - yes, 18a - yes, 18b - yes, 19a - yes, 19b - no, 20a - yes, 20b - no, 21a - yes, 21b - no, 22a - no, 22b - yes, 23a - yes, 23b - yes, 23c - no, 24a - yes, 24b - yes, 25a - yes, 25b - yes, 26a - yes, 26b - no, 26c - yes.

APPENDIX A

Analogies. 1 - sonar, 2 - overhead, 3 - head, 4 - starboard, 5 - bearing, 6 - scuttlebutt, 7 - liberty, 8 - fantail, 9 - stores, 10 - anchor, 11 - outboard, 12 - debark, 13 - lay forward, 14 - longitude, 15 - chart.

Words That Have Things in Common (Suggested answers).

(Exercise 1) 1 - storekeeper, 2 - fireman, 3 - veteran, 4 - semaphore, 5 - Major, 6 - Court-Martial, 7 - Gunner's Mate, 8 - head, 9 - journalist, 10 - restriction.

(Exercise 2) 1 - stern, 2 - anchorage, 3 - range, 4 - stanchion 5 - cruise, 6 - tender, 7 - ailerons, 8 - clock, 9 - rank, 10 - locker, 11 - scabbard.

(Exercise 3) 1 - armament, 2 - bridge, 3 - binnacle, 4 - distance,

rcise 3) 1 - armament, 2 - bridge, 3 - binnacle, 4 - distance, 5 - provisions, 6 - altimeter, 7 - sector, 8 - inspection, 9 - hydraulic, 10 - air, 11 - Seaman, 12 - water.

APPENDIX B

INSTRUCTOR COMMENTS FROM THE QUESTIONNAIRE ON THE FIELD TEST OF THE WORKBOOK

TAEG Report No. 79

INSTRUCTOR COMMENTS FROM THE QUESTIONNAIRE ON THE FIELD TEST OF THE WORKBOOK

This questionnaire was administered to the seven ART instructors at RTC Orlando after completion of a 2-month field test of the workbook. Six of the questionnaires were returned and responses to the questions are contained below. The responses are quoted directly.

1. Describe the overall value of the workbook for achieving the major goal of ART--helping recruits with reading problems graduate from recruit training.

The workbook, because it contains only military material, motivates the recruits to read it, which is helpful.

This workbook will be very helpful in simplifying <u>Basic</u> <u>Military Requirements</u> material for those students with reading problems. Those recruits who have used it have commented on how easy it is to understand.

The workbook is a good study aid for use as a self-help tool and for homework.

The workbook serves a dual purpose. It improves reading comprehension and prepares the recruits for military examinations.

This workbook is a great supplement to the material used in the ART curriculum. It provides an outlet for those recruits who have become bored with our commercial materials and yet still provides instruction in remediation of reading deficiencies.

An excellent tool for both reading and Navy information.

2. How did you assign the workbook to your students?

Both as a part of the separate skill module and after completing all assigned modules.

Students had to complete workbook before moving into the study skills module.

Mostly during free time, also for phonics and literal and inferential comprehension.

Mostly for free time but also for extra work in problem areas, especially vocabulary.

During free time, as a supplement to the study skills module.

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3. <u>Describe overall student reaction to the workbook</u>.

Most students showed interest in the workbook.

Excellent.

The recruits really enjoyed working with the book. Some recruits said the work really helped them to understand military terms and other military material.

Good.

They liked its clarity.

They felt it helped learning the sentry orders.

4. <u>Do you recommend specific format changes (like producing a separate answer booklet in order to make the workbook reusable)?</u>

If the workbook is to be used in ART only then the answers should be put in a separate booklet, but if the recruits are to keep it, the answers should be provided.

No.

The book should be taken with the recruit through his or her recruit training.

The recruits need to have their own personal copies to keep and make notes in.

The answers should not be included in the workbook. The teachers should have the key. To save money, one set of workbooks could be used with answers put in student notebooks.

5. What visual or audio aids would make the workbook more useful?

That should be left to the individual instructor.

Transparencies on rate badges for petty officers and other enlisted personnel and transparencies on "Orders to the Sentries."

Transparencies for the art work and tapes for a read along for certain sections.

None needed.

6. Did you allow students to check the answer key? Do you recommend inclusion of the answer key in the student version of future editions of the workbook or should this only be included in a teacher's manual?

If the workbook is to become the recruits personal property, then I recommend that the answer sheet be included in future editions.

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Yes. Yes.

The answer key should be taken out of the recruit version and only be placed in the teacher's manual.

Yes. Yes.

Answer key should only be placed in teacher's manual.

7. Did you make use of the reading rate chart in appendix B.

Rarely.

Yes.

No.

Yes.

No.

8. Other Comments.

I would like the subject matter expanded to include firefighting, damage control, nuclear, biological and chemical (NBC) warfare, ship and shore organization and other subjects taught at RTC.

Let's have some more, please!

I like the workbook very much and plan to incorporate it into my program of study.

I used this book more for a study aid for the recruit than for teaching. They used the book for chain of command recognition and the eleven general orders.

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